SEQUENCE LISTING

<110> Craig Rosen,
      Steve Ruben

<120> Human Breast and Ovarian Cancer Associated Gene Sequences and
Polypeptides

<130> PA103PCT

<140> Unassigned
<141> 2000-03-08

<150> 60/124,270
<151> 1999-03-12

<160> 846

<170> PatentIn Ver. 2.0

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2

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<213> Homo sapiens

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<222> (842)
<223> n equals a,t,g, or c

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caaagatagt garaagcaga cactgctcct tgtgcagctc tggtacctcc tgcccactgc 240
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gggaggggac ttcttgtggt aagagcaagt gcaggtatga aatgcgaaga ttgccccagc 360
taaaagtgga caagtccgct ttgtgagatg aatacttcct gagaaacttg acaagtatct 420
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3

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ctccatttta ccattatgaa aactatcatt aaaaaaaaca gtttagatgc cttctccttt 480
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`<212> DNA`
`<213> Homo sapiens`

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`<222> (246)`
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gtattatttg caaggagtca aagatgatgt cttttcccag aggcatgaac cttagaaatg 120
ctttcgatgg ggatgtttct gtaacactgt gttattctgg atcttcaaat aatagcaaag 180
ccaattactc taaatgtaaa attttttctat tcccaaggtt cacttttgtt tggtaggttt 240
tcacgntttt aaatactgtt taatggaaga aaaatacgta gccaggcgtg gtggctcaca 300
cctgtagccc cggaactttg ggagactgaa gcgggcagat cacgaggtca ggag        354
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`<212> DNA`
`<213> Homo sapiens`

`<220>`
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`<222> (502)`
`<223> n equals a,t,g, or c`

`<400> 4`
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acggggcacg gcgagaggtc ctgccagata agctgtaggg gctcaggcca ccctccctgc 180
cacgtggaga cgcagaggcc gaacccaaac tggggccacc tctgtaccct cacttcaggg 240
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4

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cacctgagcc accctcagca ggagctgggg tggcccctga gctccaacgg ccataacagc 300
tctgactccc acgtgaggcc acctttgggt gcaccccagt gggtgtgtgt gtgtgtgtga 360
gggttggttg agttgcctag aacccctgcc agggctgggg gtgagaaggg gagtcattac 420
tccccattac ctagggcccc tccaaaagag tccttttaaa taaatgagct atttaggtgc 480
wraaaaaaaa aaaaaaaaac cncggggggg gccc                              514
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<210> 5
<211> 2035
<212> DNA
<213> Homo sapiens

<400> 5
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atactgtcaa aacataagca aatgtcgtcg tgtgttgatg gctcaacatt ttgatgaagt 180
atggaactca gaagcatgta acaaaatgtg cgrtaactgc tgtaaagaca gtgcatttga 240
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amctggaatg gaaaaactca ctcccattgg aaactggatt gattcttggr tgggaaaggg 360
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<222> (998)
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ccagaatgga ctggagtgaa ggcgtgtcta gagtgtgggc tggctgttgt gctggaaagc 1140
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<211> 624
<212> DNA
<213> Homo sapiens

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tctatagcat ttgatgttac aactctaagc gtagttcaaa gacatttaaa ttgacaagtt 180
accagttaaa gaatttagaa tatattagat cccatctagt attatatatt ttttctagtt 240
gatcattgag cagtaaatac caaatactcg attagaaggt aatttttaca ttgtttttgaa 300
agggtgaamc aatttatctc ctctggtatt attcttaaac cacagatagg gatagtaggg 360
tagtgaaacg mataaatacc tggtagaaga caagagactt gggctctaca cctggctctg 420
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aarggaatgt ctgttgatat tctgagtcga ttttcatttg cttttgttcc agaacggtta 600
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6

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<213> Homo sapiens

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c                                                                  301

<210> 9
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<212> DNA
<213> Homo sapiens

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cagctgttca tccatttcgt gttttttcct gtcaaacatt aatccagcaa atatatgagg 180
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gatatagcag caataaaaac actaatttgt gggtatttaa gaaaacctgg agaataaact 660
catactttaa aagatcaaaa aaaaaa                                        686

<210> 10
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<222> (394)
<223> n equals a,t,g, or c
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7

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<211> 563 .
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<222> (510)
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<220>
<221> misc feature
<222> (562)
<223> n equals a,t,g, or c

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gctgtaataa tttaaccttg tattcttgtg ccatattctg tcttttattt acttataaag 240
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actgtgggct ctggagagag gaggggcaa tagagctagg rattaaggaa tcagttgwgt 480
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agaaaggggg atgaaaaaaa ant 563

8

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<211> 443
<212> DNA
<213> Homo sapiens

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gtcatcggcc acgtggactc cggaaagtcc accaccacgg gccacctcat ctacaaatgc 180
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ggatccttca agtatgcctg ggtgctggac aagctgaagg cggasgtgag cgcgrrcatc 300
accatcgaca tctccctctg gaagttcgag accaccaagt actacatcac catcatcgat 360
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<210> 13
<211> 2438
<212> DNA
<213> Homo sapiens

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<222> (117)
<223> n equals a,t,g, or c

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<222> (681)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (713)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2413)
<223> n equals a,t,g, or c

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gccccgatgg actcctgacc ataatcctag ccccgagaca ccatcctgag ccagggnaac 120
agccccaggg ttgggggggtg ccggcatctc ccctagctca ccaggcctgg cctctgggca 180
gtgtggcctc ttggctattt ctgtgtccag ttttggaggc tgagttctgg ttcatgcaga 240
caaagccctg tccttcagtc ttctagaaac agagacaaga aaggcagaca caccgcggcc 300
aggcacccat gtgggcgccc accctgggct ccacacagca gtgtccccctg ccccaraggt 360
cgcagctacc ctcagcctcc aatgcattgg cctctgtacc gcccggcagc cccttctggc 420
cggtgctggg ttcccactcc cggcctaggc acctccccgc tctccctgtc acgstcatgt 480
cctgtcctgg tcctgatgcc cgttgtctag gagacagagc caagcactgc tcacgtctct 540
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9

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gccgcctgcg tttggaggcc cctgggctct cacccagtcc ccacccgcct gcagagaggg 600
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cctcgggatg ccgttctgtt ccaacctcct gctctgggac gtggacatgc ctcaaggata 1560
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gagcatgggg gctgccagcg tctgttgtgg aaagtagctg ctagtgaaat ggctggggcc 1680
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aaaaaaaaaa ttnctcggtc cgcaagggaa ttcagtgg                            2438
```

<210> 14
<211> 2347
<212> DNA
<213> Homo sapiens

<400> 14
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cgccgccgcg gtttgtcgcc agaaggaaga tggcggatct ggaggagcag ttgtctgatg 120
aagagaaggt gcgtatagca gcaaaattca tcattcatgc ccctcctgga gaatttaatg 180
aggttttcaa tgatgttcgg ttactgctta ataatgacaa tcttctcagg gaaggagcag 240
cccatgcatt tgcacagtat aacttggacc agtttactcc agtaaaaatt gaaggttatg 300
aagatcaggt attgataaca gaacatggcg acttgggaaa tggaaagttt ttggatccaa 360
agaacagaat ctgtttttaaa tttgatcact taaggaagga ggcaactgat ccaagaccct 420
gtgaagtaga aaatgcagtt gaatcatgga gaacttcagt agaaactgct ctgagagctt 480
acgtaaaaga acattacccg aatggagtct gcactgtgta tggcaaaaaa atagatggac 540
agcaaaccat tattgcatgc atagaaagcc atcagttcca agcaaaaaat ttttggaatg 600
gtcgttggag gtcagaatgg aagtttacaa tcactccttc aaccactcaa gtggttggca 660
tcttgaaaat tcaggttcat tattatgaag atggtaatgt tcagctagtg agtcataaag 720
```

10

```
atatacaaga ttccctaaca gtgtctaatg aagtgcaaac agcaaaagaa tttataaaga 780
ttgtagaagc tgcagaaaat gaataccaga ctgccatcag tgagaattat cagacaatgt 840
cggacactac tttcaaagcc ttacgtcgac agttgccagt tacacgcact aagattgatt 900
ggaacaagat ccttagctac aagattggca aagagatgca gaatgcataa gatgaacatt 960
gcatgaccgg atcattttag tgtctttgcg ttaaaaaatc attgcaaaag tattctgaac 1020
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gatgattctt ctagtttatg gttaaaagtt tttgaagtgt ctcaaaaata ttttactaac 1260
tgtaacccta aaattgatgt cttttggttt atgaaatcag taattttga tatttccca 1320
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ccacaaatgt attataacaa ggcaaattgt aatatatata atcctgaact catgaccatg 1740
tctcggttta tttttttttt cttggattga aaagtactga aattcaatgt gacattaaaa 1800
tgcaaatttt cctatttatt tgagtagaaa atcacttacc agtgagcata tatattttaa 1860
aatactttct ttggatattg taattcttaa ctggttgtaa attagaaaag ctgggattac 1920
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taatattttc aaaaatagtt ctactgatgc tacaggaatt tcaagcctgt ggtgaatgtt 2040
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atacttgagt ggaatccttt cctcacgtac tcccacagac gtctgggcct ggaaattttt 2160
tttttatttt attttattgt tttttttttt agaaaaacac cacttttatt atgtacaata 2220
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aatttctttt taaaatcact gttgggcttt gaaagcattg agaatataat atgaaattat 2340
gaaaaaa                                                              2347
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<210> 15
<211> 2006
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (862)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1006)
<223> n equals a,t,g, or c

<400> 15
ggcagagctg taccagtggc agcagcaagc cgaatagccc cagcatttcc ccttcaatac 60
ttagtaacac ggagcacaag aggggacctg aggtcacttc ccaagggggtt cagacttcca 120
gcccagcatg taaacaagag aaagacgata aggaagagaa gaaagacgca gctgagcaag 180
ttaggaaatc aacattgaat cccaatgcaa aggagttcaa cccacgttcc ttctctcagc 240
caaagccttc tactaccgca acttcacctc ggcctcaagc acaacctagc ccatctatgg 300
tgggtcatca acagccaact ccagtttata ctcagcctgt ttgtttgca ccaaatatga 360
```

11

```
tgtatccagt cccagtgagc ccaggcgtgc aacctttata cccaatacct atgacgccca 420
tgccagtgaa tcaagccaag acatatagag caggtaaagt accaaaatatg ccccaacagc 480
ggcaagacca gcatcatcag agtgccatga tgcacccagc gtcagcagcg ggcccaccga 540
ttgcagcmac cccaccagct tactccacgc aatatgttgc ctacagtcct cagcagttcc 600
caaatcagcc ccttgttcag catgtgccac attatcagtc tcagcatcct catgtctata 660
gtcctgtaat acagggtaat gctagaatga tggcaccacc aacacacgcc cagcctggtt 720
tagtatcttc ttcagcaact cagtacgggg ctcatgagca gacgcatgcg atgtatgcat 780
gtcccaaatt accatacaac aaggagacaa gcccttcttt ctactttgcc atttccacgg 840
gctcccttgc tcagcagtat gngcraccct aacgctaccc tgcacccaca tactccacac 900
cctcagcctt cagctacccc cactggacag cagcaaagcc aacatggtgg aagtcatcct 960
gcacccagtc ctgttcagca ccatcagcac caggccgccc aggctnctcc atctggccag 1020
tccacagcag cagtcagcca tttaccacgc ggggcttgcg ccaactccac cctccatgac 1080
acctgcctcc aacacgcagt cgccacagaa tagtttccca gcagcacaac agactgtytt 1140
tacgatccat ccttctcacg ttcagccggc gtataccaac ccaccccaca tggcccacgt 1200
acctcaggct catgtacagt caggaatggt tccttctcat ccaactgccc atgcgccaat 1260
gatgctaatg acgacacagc cacccggcgg tccccaggcc gccctcgctc aaagtgcact 1320
acagcccatt ccagtctcga caacagcgca tttcccctat atgacgcacc cttcagtaca 1380
agcccaccac caacagcagt tgtaaggctg ccctggagga accgaaaggc caaattccct 1440
cctcccttct actgcttcta ccaactggaa gcacagaaaa ctagaatttc atttattttg 1500
tttttaaaat atatatgttg atttcttgta acatccaata ggaatgctaa cagttcactt 1560
gcagtggaag atacttggac cgagtagagg catttaggaa cttgggggct attccataat 1620
tccatatgct gtttcagagt cccgcaggta ccccagctct gcttgccgaa actggaagtt 1680
atttatttt taataaccct tgaaagtcat gaacacatca gctagcaaaa gaagtaacaa 1740
gagtgattct tgctgctatt actgctaaaa aaaaaaaaa aaaaaaatca agacttggaa 1800
cgccctttta ctaaacttga caaagtttca gtaaattctt accgtcaaac tgacggatta 1860
ttatttataa atcaagtttg atgaggtgat cactgtctac agtggttcaa cttttaagtt 1920
aagggaaaaa cttttacttt gtagataata taaaataaaa acttaaaaaa aatttaaaaa 1980
ataaaaaaag ttttaaaaac tgaaaa                                     2006
```

<210> 16
<211> 986
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (613)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (932)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (933)
<223> n equals a,t,g, or c

<220>
<221> misc feature

12

```
<222> (985)
<223> n equals a,t,g, or c

<400> 16
tcaaagtaac tcctgacctc aagccaacag aagcctcaag ttcggctttt cgcttgatgc 60
cagctcttgg cgtgagtgtg gctgaccaga agggaaaaag cacagtggcc tcttcagaag 120
caaaaccagc tgccacgatc cgcatcgtgc agggactggg agtgatgcct cccaaagcag 180
gccagaccat caccgttgca acccacgcca agcaaggggc ctcggtggcc agtgggtctg 240
gaactgtcca tacttcagcg gtgtccttac ccagtatgaa tgctgctgtg tccaagactg 300
tagctgtggc ttctggggct gcaagacccc catcagcatc agcacaggag cccccaccgt 360
gcggcaggtc cctgtcagca ccacggttgt gtccacgtcc caggctggga agttgcctac 420
acggatcaca gttcccctct ctgtgatcag ccagccaatg aagggcaaga gcgtggtcac 480
agcccccatc atcaaaggca accttggagc caacctcagt gggttgggcc gcaacatcat 540
cctcacaact atgccagcag gcactaagct cattgctggc aataagcctg ttagtttcct 600
cactgctcag canttgcagc agcttcagca gcaaggtcag gccacacagg tgcgcatcca 660
gactgtccct gcatcccatc tccaacaggg aacagcttct ggctcctcca aagcagtctc 720
cactgttgtt gtgactacag ctccgtctcc taaacaggca cctgagcaac aatgattatg 780
agagaggatg gcttccgtga aagaccatgc ctggtctgtc ctggctgaga agggaccagg 840
gagttgcatc attgtttaa gctgcctgtt caaggcagcc aggcgagggt gatggc aacg 900
gtggcctggt tygtgggcct ggattctgcg cnnggggccat agtgggagca ccctgagaaa 960
ggtcactccc gggttccaaa ggctng                                      986
```

```
<210> 17
<211> 1589
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (555)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1033)
<223> n equals a,t,g, or c

<400> 17
tttgaacttg gggaaacaag gttgncatcc cagtggcctc aaccctccct cagcccctct 60
tgcccccac cccagcctaa gatgaagagg atcggaggct tgtcagagct gggaggggtt 120
ttcgaagctc agcccacccc cctcattttg gatataggtc agtgaaggcc cagggagagg 180
```

13

```
ccatgattcg cccaaagcca gacagcaacg gggaggccra gtgcaggctg gcaccgcctt 240
ctctaaatga ggggcctcag gtttgcctga gggcgagggg agggtggcag gtgaccttct 300
gggaaatggc ttgaagccaa gtcagctttg ccttccacgc tgtctccaga cccccacccc 360
ttccccactg cctgcccacc cgtggagatg ggatgcttgc ctagggcctg gtccatgatg 420
gagtcaggtt tggggttcgt ggaaagggtg ctgcttccct ctgcctgtcm ctctcaggca 480
tgcctgtktg acatcagtgg catggctcca gtctgctgcc ctccatcccg acatggaccc 540
ggagctaaca mtggncccct agaatcagcc taggggtcag ggaccaagga cccctcamct 600
tgcaacacac agacacamgc acacacacac acaggaggag aaatctcact tttctccatg 660
agtttttct cttgggctga gactggatac tgcccggggc agctgccaga gaagcatcgg 720
agggaattga ggtctgctcg gccgtcttca ctcgcccccg ggtttggcgg gccaaggact 780
gccgaccgag gctggagctg gcgtctgtnt tcaagggctt acacgtggag gaatgctccc 840
ccatcctccc cttccctgca aacatggggt tggctgggcc cagaaggttg tgatgaagaa 900
aagcgggcca gtgtgggaat gcggcaagaa ggaattgact tcgactgtga cctgtgggga 960
tttctcccag ctctagacaa ccctgcaaag gactgttttt tcctgagctt ggccagaagg 1020
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gccccttttt actcccttg agctgagatg gaaccctttt tgtgcccgag ctgggggcca 1440
tgagctccag accccagca accctcctat cacctcccct ccttgcctcc tgtgtaatca 1500
tttcttgggc cctcctgaaa cttacacaca aaacgttaag tgatgaacat taaatagcaa 1560
agaaagaaaa ataaaaaaaa aaaaaaaaa                                 1589
```

```
<210> 18
<211> 846
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (746)
<223> n equals a,t,g, or c

<400> 18
gcacccgcct cgcccgtgat gccaccgcag acccagtccc ccgggcagcc ggcccagccc 60
gcgcccatgg tgccactgca ccagaagcag agccgcatca cccccatcca gaagccgcgg 120
ggcstcgacc ctgtggagat cctgcaggag cgcgagtaca ggctgcaggc tcgcatcgca 180
caccgaattc aggaacttga aaaccttccc gggtccctgg ccggggattt gcgaaccaaa 240
gcgaccattg agctcaaggc cctcaggctg ctgaacttcc agaggcagct gcgccaggag 300
gtggtggtgt gcatgcggag ggacacagcg ctggagacag ccctcaatgc taaggcctac 360
aagcgcasaa gcgccagtcc ctgcgcgagg cccgcatcac tgagaagctg gagaagcagc 420
agaagatcga gcaggagcgc aagcgccggc agaagcacca ggaatacctc aatagcattc 480
tccagcatgc caaggatttc aaggaatatc acagatccgt cacaggcaaa atccagaagc 540
tgaccaaggc agtggccacg taccatgcca acacggagcg ggagcagaag aaagagaacg 600
agcggatcga gaaggagcgc atgcggaggc tcatggctga agatgaggag gggtaccgca 660
agctcatcga ccagaagaag gacaagcgcc tggcctacct cttgcagcag acagacgagt 720
acgtggctaa ctcacggagc tggtgncggc acaaggctgc ccaggtcgcc aaggagaaaa 780
agaagaaaaa gaaaaagaag aaggcagaaa atgcagaagg acagacgcct gccattgggc 840
cggatg                                                          846
```

14

```
<210> 19
<211> 2192
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2106)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2118)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2143)
<223> n equals a,t,g, or c

<400> 19
aaacaaaagg cgatattctg cctgggcaaa tctgtgacta atcttcctca agtcataaaa 60
caaaagctga caccttata tgagctggta aaggaagtac cttgtgcctc tgtgnaaaaa 120
actatacctg aaatgggctc ttgaagagta tctggatgaa tttgacccct gtcattgccg 180
gccttgtcaa aatggtggtt tggctactgt tgaggggacc cattgtctgt gccattgcaa 240
accgtacaca tttggtgcgg cgtgtgagca aggagtcctc gtagggaatc aagcaggagg 300
ggttgatgga ggttggagtt gctggtcctc ttggagcccc tgtgtccaag ggaagaaaac 360
aagaagccgt gratgcaaka acccacctcc cagtgggggt gggagatcct gcgttggaga 420
aacgacagaa agcacacaat gcgaagatga ggagctggag cacttgaggt tgcttgaacc 480
acattgcttt cctttgtctt tggttccaac agaattctgt ccatcacctc ctgccttgaa 540
agatggattt gttcaagatg aaggtacaat gtttcctgtg gggaaaaatg tagtgtacwc 600
ttgcaatgaa ggatactctc ttattggaaa cccagtggcc agatgtggag aagatttacg 660
gtggcttgtt ggggaaatgc attgtcagaa aattgcctgt gttctacctg tactgatgga 720
tggcatacag agtcacccc aaaaacctt ctacacagtt ggtgagaagg tgactgtttc 780
ctgttcaggt ggcatgtcct tagaaggtcc ttcagcattt ctctgtggct ccagccttaa 840
gtggagtcct gagatgaaga atgcccgctg tgtacaaaaa gaaaatccgt taacacaggc 900
agtgcctaaa tgtcagcgct gggagaaact gcagaattca agatgtgttt gtaaaatgcc 960
ctacgaatgt ggaccttcct tggatgtatg tgctcaagat gagagaagca aaaggatact 1020
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tggtagggac agctgtactc tgcctgcctc agctgagaaa gcttgtggtg cctgcccact 1140
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ggaagaaggg tttagcattt gtgtggaagt aacggcaag agcagacga tgtctgagtg 1260
tgaggcgggc gctctgagat gcagagggca gagcatctct gtcaccagca taaggccttg 1320
tgctgcggaa acccagtagg ctcctggagg ccmtggtcag cttgcttgga atccagcagg 1380
cagctggggc tgagtgaaaa catctgcaca actgggcact ggacagcttt tccttctcca 1440
```

.

15

```
gtgtctacct tcctcctcaa ctcccagcca tctgtataaa cacaatcctt tgttctccca 1500
aatctgaatc gaattactct tttgcctcct ttttaatgtc agtaaggata tgagcctttg 1560
cacaggctgg ctgcgtgttc ttgaaatagg tgttaccttc tctgggcctt ggttttttaa 1620
aatctgtaaa attagaggat tgcactagag aaacttgaat gctccattca ggcctatcat 1680
tttattaagt atgattgaca cagcccatgg gccagaacac actctacaaa atgactagga 1740
taacagaaag aacgtgatct cctgattaga gagggtggtt ttcctcaatg gaaccaaata 1800
taaagaggac ttgaacaaaa atgacagata caaactattt ctatcctgag tagtaatctc 1860
acacttcatc ctatagagtc aaccaccaca gataggratt ccttattctt tttttaattt 1920
ttttaagaca gagtctcact ttgttgccca ggytggagcg cagtggggtg atctcatctc 1980
cctgcaacct ccgcctcctg ggttcaagcg attcttgtgc ctcagcttcc caagcagctg 2040
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tttcancatg ttggccangc tcgtctccaa ctcctgacct cangtaatcc gcctgccttg 2160
gcctcccaaa gtgctgggat acagacatga ac                                2192
```

<210> 20
<211> 1011
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

<400> 20
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cggggatgga agcgttttg gggtcgcggt ccggactttg ggcgggggt ccggccccag 120
gacagtttta ccgcattccr tccactcccg attccttcat ggatccggcg tctgcacttt 180
acagaggtcc aatcacgcgg acccagaacc ccatggtgac cgggacctca gtcctcggcg 240
ttaagttcga gggcggagtg gtgattgccg cagacatgct gggatcctac ggctccttgg 300
ctcgtttccg caacatctct cgcattatgc gagtcaacaa cagtaccatg ctgggtgcct 360
ctggcgacta cgctgatttc cagtatttga agcaagttct cggccagatg gtgattgatg 420
aggagcttct gggagatgga cacagctata gtcctagagc tattcattca tggctgacca 480
gggccatgta cagccggcgc tcgaagatga acccttgtg gaacaccatg gtcatcggag 540
gctatgctga tggagagagc ttcctcggtt atgtggacat gcttggtgta gcctatgaag 600
cccttcgct ggccactggt tatggtgcat acttggctca gcctctgctg cgagaagttc 660
tggagaagca gccagtgcta agccagaccg aggcccgcga cttagtagaa cgctgcatgc 720
gagtgctgta ctaccgagat gcccgttctt acaaccggtt tcaaatcgcc actgtcaccg 780
aaaaaggtgt tgaaatagag ggaccattgt ctacagagac caactgggat attgcccaca 840
tgatcagtgg ctttgaatga aatacagatg cattatccag aactgaagtt gccctacttt 900
taactttgaa cttggctagt tcaaagatag actcttcttt tgtaaagtaa ataaattctt 960
caaaatgcaa aaaaaaaaa aaaaaaaaaa cttcragact agttctctct c             1011
```

<210> 21
<211> 2019
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2003)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2007)
<223> n equals a,t,g, or c

<400> 21
ggcagagccc aattcactcc cttccctcgc agtgactttc tcattctccc tgggtacatc 60
gacttcactg cagaccaggt ggacctgact tctgctctga ccaagaaaat cactcttaag 120
accccactgg tttcctctcc catggacaca gtcacagagg ctgggatggc catagcaatg 180
gcggtgagcc ccatgggggtg tgggggaagg agcaaggact ccatcgcctt tccccaaagg 240
cattcagtcc tgcttctkgt cacttagtag tagtctcttt ttaatcctgt agcttacagg 300
cggtattggs ttcatccacc acaactgtac amctgaattc caggccaatg aagttyggaa 360
agtgaaggty wgaagggcaa cgatcattag caagcgctcc tgggaattgc actgaggtgg 420
ggtggggtgg gagtaggggt ttattctaat ttagtattct ttcttcccac catggggttc 480
agttactgag aagaccctga gattctgttt cttaaagcag cagcaataga ccaggtgtac 540
agtgcctcca gcctacccat gtctctaaga tgtgttggtg tgatttggtc ttgtggcact 600
gccaaaggga tcgataagca gagacccat gcttcagatc aagagcctga tgaaagtagt 660
tcaaagatgc gatgcccttt ctcaccatcc ctttccagaa atatgaacag ggattcatca 720
cagaccctgt ggtcctcagc cccaaggatc gcgtgcggga tgttttttrag gccaaggccc 780
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gctggcctgt gggcggcccc aagcaacagc agtgtacaag gtgtcagagt atgcacggcg 1440
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acccaagtcc gagccatgat gtactctggg gagcttaagt ttgagaagag aacgtcctca 1860
gcccaggtgg aaggtggcgt ccatagcctc cattcgtatg agaagcggct tttctgaaaa 1920
gggatccagc acacctcctc ggtttttttt tcaataaaag tttagaaaga aaaaaaaaa 1980
aaaaaaaat tctcgggggg ggncccngta cccaattgg   2019

<210> 22
<211> 2022
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1588)

17

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1615)
<223> n equals a,t,g, or c

<400> 22
gctttctggc gggcgctggg agaagacgga cctcacctac aggatccttc ggttcccatg 60
gcagttggtg caggagcagg tgcggcagac gatggcagag gccctaaagg tatggagcga 120
tgtgacgcca ctcacctta ctgaggtgca cgagggccgt gctgacatca tgatcgactt 180
cgccaggtac tgcatggggg acgacctgcc gtttgatggg cctggggcat cctggcccat 240
gccttcttcc ccaagactca ccgagaaggg gatgtccact tcgactatga tgagacctgg 300
actatcgggg atgaccaggg cacagacctg ctgcaggtgg casccatgaa tttggccacg 360
tgctggggct gcagcacaca acagcagcca aggccctgat gtccgccttc tacacctttc 420
gctacccact gagtctcagc ccagatgact gcaggggcgt tcaacaccta tatggccagc 480
cctggccact gtcacctcca ggaccccagc cctgggcccc caggctggga tagacaccaa 540
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ggtctccacc atccgaggcg agctcttttt cttcaaagcg ggctttgtgt ggcgcctccg 660
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cagccctgtg gacgctgcct tcgaggatgc ccaggccac atttggttct tccaaggtgc 780
tcagtactgg gtgtacgacg gtgaaaagcc agtcctgggc cccgcacccc tcaccgagct 840
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gcatgggact gagcccatgt ctcctcaggg ggatggggtg gggtacaacc accatgacaa 1320
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gaggctttgg catgacttaa gaggaagggc agtcttgggc ccgctatgca ggtcctgggc 1440
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gaactggagt gtccttgctg tatccctgtt gtgaggttcc ttccaggggc tggcactgaa 1560
gcaaggggtgc tggggcccca tggccttnca gccctggctg agcaactggg ctgtnagggc 1620
agggccactt cctgaggtca ggtcttggta ggtgcctgca tctgtctgcc ttctggctga 1680
caatcctgga aatctgttct ccagaatcca ggccaaaaag ttcacagtca aatggggagg 1740
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caggccggat cctcctgaag cccttttcgc agcactgcta tcctccaaag ccattgtaaa 1860
tgtgtgtaca gtgtgtataa accttcttct tctttttttt ttttaaactg aggattgtca 1920
ttaaacacag ttgttttcta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aaaaaaaaaa aaaagggcg gccgctcgcg atctagaact ag                      2022

<210> 23
<211> 1126
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1126)
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<223> n equals a,t,g, or c

<400> 23
ccctttcccca ctgcacacac ctcagaggct gttcttgggg ccctacacct tgaggagggg 60
caggtaaact cctgtccttt acacattcgg ctccctggag cagactctgg tcttctttgg 120
gtaaacgtgt gacggggga agccaaggtc tggagaagct cccaggaaca ayygatggcc 180
ttgcagcact cacacaggac ccccttcccc tacccctcc tctctgccgc aatacaggaa 240
ccccagggg aaagatgagc ttttctaggc tacaatttc tcccaggaag ctttgatttt 300
taccgtttct tccctgtatt ttctttctct actttgagga aaccaaagta accttttgca 360
cctgctctct tgtaatgata tagccagaaa aacgtgttgc cttgaaccac ttccctcatc 420
tctcctccaa gacactgtgg acttggtcac cagctcctcc cttgttctct aagttccact 480
gagctccatg tgcccctct accatttgca gagtcctgca cagtttctg gctggagcct 540
agaacaggcc tcccaagttt taggacaaac agctcagttc tagtctctct ggggccacac 600
agaaactctt tttgggctcc ttttctccc tctggatcaa agtaggcagg accatgggac 660
caggtcttgg agctgagcct ctcacctgta ctcttccgaa aaatcctctt cctctgaggc 720
tggatcctag ccttatcctc tgatctccat ggcttcctcc tccctcctgc cgactcctgg 780
gttgagctgt tgcctcagtc ccccaacaga tgcttttctg tctctgcctc cctcacctg 840
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tcaccagctg cctcttctgt gggtgaccca ggtccttgtt tgctgttgat ttctttccag 960
agggggttgag cagggatcct ggtttcaatg acggttggaa atagaaattt ccagagaaga 1020
gagtattggg tagatatttt ttctgaatac aaagtgatgt gtttaaatac tgcaattaaa 1080
gtgatactga aacacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaan   1126

<210> 24
<211> 2598
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2304)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2500)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2533)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2553)
<223> n equals a,t,g, or c

<400> 24
ggcacagctt gttttccaa gcagctgttt ggctttccra agcccacttt ctgtctttaa 60
raggtttaaa garactacca gaccattttc caatgaatgt cttggtacca ccagacccgt 120

19

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agttcctatt gattcatcag attttgcatt ggatattcgc atgcctgggg ttacacctaa 180
acagtccgat acatacttct gcatgtctat gcgaatacca gtggatgagg aagccttcgt 240
gattgacttc aagcctcgag ccagcatgga tactgtccat cacatgttac tttttggatg 300
caatatgcct tcatccactg graattactg gttttgtgat gaaggaacct gtacagataa 360
agccaatatt ctgtatgcct gggcgagaaa tgctccccct acccggctcc ccaaaggtgt 420
tggattcaga gttggaggag agactggaag taaatacttt gtactacagg tacactatgg 480
ggatattagt gcttttagag ataataacaa ggactgttct ggtgtgtcct tacacctcac 540
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cccagcagga gaaaaagtgg tgaattctga catttcatgc cattrtwaaa attatccaat 660
gcatgtcttt gcctatagag ttcacactca ccatttaggt aaggtagtaa gtggatacag 720
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ccagaacaca caggagattt ccacatggaa gaggcactgg attggcctgg agtatacttg 1500
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ttctgtcaac ccactgatgt ggctgtggat ccaggcactg gagccattta tgtatcagat 1920
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tgttttaaaa ctgacaccaa agaatttgtg agagagatta agcattcatc atttggaaga 2160
aatgtatttg caatttcata tataccaggc ttgctctttg cagtgaatgg gaagcctcat 2220
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ggaaatccaa agaagcccga gggcatttgt tgtttcccccn ttacaaccct tcgggttatt 2520
ccggtggttg gtncctggcg gggccatggc ccnaatttaa ttccggtggg aaaaaatccc 2580
aggggcccctt tgggaaga                                                 2598
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<210> 25
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (358)
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20

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (368)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c

<400> 25
gcggccgagc tgcagcccgg gctcagtctc cgccgccgcc gtgaacatgg agcccccgga 60
cgcaccggcc caggcgcgcg gggccccgcg gctgctgttg ctcgcagtcc tgctggcggc 120
gcacccagat gcccaggcgg aggtgcgctt gtctgtaccc ccgctggtgg aggtgatgcg 180
aggaaagtct gtcattctgg actgcacccc tacgggaacc cacgaccatt atatgctgga 240
atggttcctt accgaccgct cgggagctcg ccccgcctcg cctcggctg agatgcaggg 300
ctctgagctc caggtcacaa tgcacgacac ccgggggccgc agtcccccat accagctngg 360
actyccangg ggcgcctggt ngctggnytg anggcccark tggcgacgag c          411

<210> 26
<211> 657
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (634)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (652)
<223> n equals a,t,g, or c

<400> 26
aactgaagaa ttttgagtga attagacctt tatttttcta tctggttgga tggtggcttt 60
aggggaaggg ggaaaggtgt aggctggggg attgaggtgg ggaatcattt tagctggtgt 120
cagcccctct tcccttcctc cattgcacat gaacatatgt ccatccatat atattcatca 180
gaatgttaat ttattttgct ccctctgtta ggtccatttt ctaagggtag aagaggcaag 240
```

21

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tggtagggat gaggtctgat aagaacccag ggtggagagg gagactcctg ggcagccgtt 300
ttcctcatcc tttccctctc ccagtccatt tccaaatgtg gcctccatgt gggtgctagg 360
gacatgggaa aaaccactgc tatgccattt cttctctctg ttcccttcct cacccccgac 420
ggtgtggctg atgatgtctt ctggtgtcat ggtgaccacc ccctgttccc tgttctggta 480
tttcccctgt cagtttcccc tctcggccag gttgtgtccc aaaatcccct cagcctcttc 540
tctgcacgtt gctgaaggtc caggcttgcc tcaagttcca tgcttgagca ataaagtgga 600
aacaataaaa cctgggaaaa aaaaaaaagg gggncgttct aaaggatccc cnagggg    657
```

```
<210> 27
<211> 1903
<212> DNA
<213> Homo sapiens
```

```
<400> 27
gggcacggga ctcgtgccga ttcggcagag cacaaagttt gactccagtc tggatcgcaa 60
ggacaaattc tcctttgacc tgggaaaagg ggaggtcatc aaggcttggg acattgccat 120
agccaccatg aaggtggggg aggtgtgcca catcacctgc aaaccagaat atgcctacgg 180
ttcagcaggc agtcctccaa agattccccc caatgccacg cttgtatttg aggtggagtt 240
gtttgagttt aagggagaag atctgacgga agaggaagat ggcggaatca ttcgcagaat 300
acagactcgc ggtgaaggct atgctaagcc caatgagggt gctatcgtgg aggttgcact 360
ggaagggtac tacaaggaca agctctttga ccagcgggag ctccgctttg agattggcga 420
gggggagaac ctggatctgc cttatggtct ggagagggcc attcagcgca tggagaaagg 480
agaacattcc atcgtgtacc tcaagcccag ctatgctttt ggcagtgttg ggaaggaaaa 540
gttccaaatc ccaccaaatg ctgagctgaa atatgaatta cacctcaaga gttttgaaaa 600
ggccaaggag tcttgggaga tgaattcaga agagaagctg gaacagagca ccatagtgaa 660
agagcggggc actgtgtact tcaaggaagg taaatacaag caagctttac tacagtataa 720
gaagatcgtg tcttggctgg aatatgagtc tagttttttcc aatgaggaag cacagaaagc 780
acaggccctt cgactggcct ctcacctcaa cctggccatg tgtcatctga aactacaggc 840
cttctctgct gccattgaaa gctgtaacaa ggccctagaa ctggacagca acaacgagaa 900
gggcctcttc cgccggggag aggcccacct ggccgtgaat gactttgaac tggcacgggc 960
tgatttccag aaggtcctgc agctctaccc caacaacaaa gccgccaaga cccagctggc 1020
tgtgtgccag cagcggatcc gaaggcagct gcccggggag aagaagctct atgccaatat 1080
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ggtggagaca gaagcatagc ccctctccac cagccctact cctgcggctg cctgcccccc 1260
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cagggtggag agggagactc ctggcagcc gtttttcctca tccttttccctctc tcccagtcc 1620
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tttcttctct ctgttccctt cctcaccccg acgtgtggcc ctaaggctgt gccacctccc 1740
cctgcccagt ccctggtctc tgtacagtgt ctgtccagga cgtctatcca tccatccttg 1800
acaacctgtc cagatgaggc cactgttatc ccagtctgtg aggggcgatc acagcccagg 1860
tgccggccga tgtggagacg ctgatggact tcagtgtgca gga            1903
```

```
<210> 28
<211> 1333
<212> DNA
<213> Homo sapiens
```

22

<220>
<221> misc feature
<222> (1311)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1313)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1319)
<223> n equals a,t,g, or c

<400> 28
ggccgctagt gcccagctcg cagaaggcgc tgctgctgga gctcaagggg ctgcaggaag 60
agccggtcga gggattccgc gtgacactgg tggacgaggg cgatctatac aactgggagg 120
tggccatctt cgggcccccc aacacctact acgagggcgg ctacttcaag gcgcgcctca 180
agttccccat cgactaccca tactctccac cagcctttcg gttcctgacc aagatgtggc 240
accctaacat ctacgagacg ggggacgtgt gtatctccat cctccacccg ccggtggacg 300
acccccagag cggggagctg ccctcagaga ggtggaaccc cacgcagaac gtcaggacca 360
ttctcctgag tgtgatctcc ctcctgaacg agcccaacac cttctcgccc gcaaacgtgg 420
acgcctccgt gatgtacagg aagtggaaag agagcaaggg gaaggatcgg gagtacacag 480
acatcatccg gaagcaggtc ctggggacaa ggtggacgcg ggtgaacggc gtgaaggtgc 540
ccaccacgct ggccgagtac tgcgtgaaga ccaaggcgcc ggcgcccgac gagggttcag 600
acctcttcta cgacgactac tacgaggacg gcgaggtgga ggaggaggcc gacagctgct 660
tcggggacga tgaggatgac tctggcacgg aggagtcctg acaccaccag aataaacttg 720
ccgagtttac ctcactaggg ccggacccgt ggctccttag acgacagact acctcacgga 780
ggttttgtgc tggtccccgt ctcctctggt tgtttcgttt tggcttttc tccctcccca 840
tgtctgttct gggttttcac gtgcttcaga gaagaggggc tgccccaccg ccactcacgt 900
cactcggggc tcggtggacg ggcccagggt gggagckgcc ggcccacctg tcccctcggg 960
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aggagccacg ggggcgctgc tgggaacgtg ggcggggggc cgtttcctga cactaccagc 1080
ctgggaggcc caggtgtagc ggtccgaggg gcccggtcct gcctgtcagc tccaggtcct 1140
ggagccacgt ccagcacaga gtggacggat tcaccgtggc cgactctttt ccctgctttg 1200
gtttgtttga aatctaaata aaactacttt atgagaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa nanaaaaana 1320
aaaaaaaaaa ttt   1333

<210> 29
<211> 1327
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (573)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (1307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1325)
<223> n equals a,t,g, or c

<400> 29
cttgttctcc gccgccgccg cccgccgccg ccgccrccgc cgcygccgct gccatggctc 60
aatacaaggg cgccgcgagc gaggccggcc gcgccatgca cctgatgaag aagcgggaga 120
agcagcgcga gcagatggag cagatgaagc agcgcatcgs ggaggagaac atcatgaaat 180
ccaacattga caagaagttc tctgcgcact acgacgcggt ggaggcagag ctcaagtcca 240
gcaccgtggg tctcgtgacc ctgaatgaca tgaaggccaa gcaggaggct ctggtgaagg 300
agcgggagaa gcagctggcc aagaaggagc agtccaagga gctgcagatg aagctgagaga 360
agcttcgaga gaaggagcgt aagaaggaag ccaagcggaa gatctccagc ctgtccttca 420
ccctggagga ggaagaagag ggaggcgagg aggaagagga ggcggccatg tatgaggagg 480
agatggaaag ggaagagatc accacgaaga agagaaaact ggggaagaac ccagacgttg 540
acacaagctt cttgcctgat cgagaccgtg agnaggagga gaatcggctt cgggaagagc 600
tgcggcagga gtgggaagcc aagcaggaga agatcaagag tgaggagatc gagatcacct 660
tcagctactg ggatggctct gggcaccggc ggacagtcaa gatgagaaag ggcaacacca 720
tgcagcagtt cctgcagaag gcgctcgaga tccttcggaa agacttcagt gagctgaggt 780
ccgcagggkt ggagcagctc atgtacatca aggaggactt gatcatccct caccatcaca 840
gcttctacga cttcatcgtc accaaggcac gggggaagag tggaccactc ttcaactttg 900
atgttcatga cgatgtgcgg ttgctcagtg acgccactgt ggagaaggat gagtcccatg 960
caggcaaggt ggtgctgagg agctggtacg agaagaacaa gcacatcttt cccgccagcc 1020
gctgggaacc ctacgaccct gaaaagaagt gggacaagta cacgatccgc tgagcatcca 1080
ggaggctgcg cggccccggc tcctcagctc cctcagtgtg ccccgtggtg tcaccgggac 1140
tccaggcacc cgctcccctg cgaccatgcc aggcacgctg ggaggaggac ggcagctgct 1200
cgtgtcctgc ccctgccaca tcagtgactg ctttattctt ttccaataaa gaagtgcacg 1260
tgtcagagct ggagcgcctg cattgtgaga aaaaaaaag gaggggnaag aaaaaaaaa 1320
agggngg                                                          1327

<210> 30
<211> 709
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (696)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (701)
<223> n equals a,t,g, or c

<400> 30
```

```
aattcccggg ttcgacccac gcgtccggaa aactgcagct tccttctcac cttgaagaat 60
aatcctagaa aactcacaaa atgtgtgatg cttttgtagg tacctggaaa cttgtctcca 120
gtgaaaactt tgatgattat atgaaagaag taggagtggg ctttgccacc aggaaagtgg 180
ctggcatggc caaacctaac atgatcatca gtgtgaatgg ggatgtgatc accattaaat 240
ctgaaagtac ctttaaaaat actgagattt ccttcatact gggccaggaa tttgacgaag 300
cactgcagat gacaggaaag tcaagagcac cataacctta gatggggggtg tcctggtaca 360
tgtgcagaaa tgggatggaa aatcaaccac cataaagaga aaacgagagg atgataaact 420
ggtggtggaa tgcgtcatga aaggcgtcac ttccacgaga gtttatgaga gagcataagc 480
caagggacgt tgacctggac tgaagttcgc attgaactct acaacattct gtgggatata 540
ttgttcaaaa agatattgtt gttttccatg atttagcaag caactaattt tctcccaagc 600
tgattttatt caatatggtt acgttggtta aataaacttt ttttagattt aaaaaaaaaa 660
aaaaaaaacc ycggggggg gcccggtacc caattngccc nttaggggg              709
```

<210> 31
<211> 1108
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c

<400> 31
```
tgcttatcct tgtgctgatg tttgtggtat ggatgaaacg ccgggataaa gaacgccagg 60
ccaaacaact tttaattgat ccagaagatg atgtaagaga taatattta aaatatgatg 120
aagaaggtgg aggagaagaa gaccaggact atgacttgag ccagctgcag cagcctgaca 180
ctgtggagcc tgatgccatc aagcctgtgg gaatcygacg aatggatgaa agaccatcc 240
acgccgagcc ccagtatccg gtccgatctg cagccccaca ccctggagac attgggggact 300
tcattaatga gggcctaaa gcggctgaca atgaccccac agctccacca tatgactccc 360
tgttagtgtt tgactatgaa ggcagtggnt ccactgntgg gtccttgagc tcccttaatt 420
cctcaagtag tggtggtgag caggactatg attacctgaa cgactggggg ccacggttca 480
agaaacttgc tgacatgtat ggtggaggtg atgactgaac ttcagggtga acttggtttt 540
tggacaagta caaacaattt caactgatat tcccaaaaag cattcagaag ctaggcttta 600
actttgtagt ctactagcac agtgcttgct ggaggctttg gcataggctg caaaccaatt 660
tgggctcaga gggaatatca gtgatccata ctgttggaa aaacactgag ctcagttaca 720
cttgaatttt acagtacaga agcactggga ttttatgtgc cttttgtac ctttttcaga 780
ttggaattag ttttctgttt aaggctttaa tggtactgat ttctgaaacg ataagtaaaa 840
gacaaaatat tttgtggtgg gagcagtaag ttaaaccatg atatgcttca acacgctttt 900
gttacattgc atttgctttt attaaaatac aaaattaaac aaamaaaaaa actcatggag 960
cgattttatt atcttggggg atgagaccat gagattggaa aatgtacatt acttctagtt 1020
ttagacttta gtttgtttt ttttttttt cactaaaatc ttaaaactta ctcagctggt 1080
tgcaaataaa gggagttttc atatcacc                                   1108
```

<210> 32
<211> 526

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (502)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (524)
<223> n equals a,t,g, or c

<400> 32
gaatttttca ttatgttgct tttgaaattt gatgcattcc tcccatttac tttattattg 60
tacacattta acacacagta gcaaattttg aacgatgtga ttgatataac ctaacaaatc 120
tgagccagtt attattagag ttgcagaata gaaacttgaa gtgctaaatg gaataatcca 180
aaggaaattt tttaaatgca ggttctagct gaaaaattca actataagaa aattgtattt 240
atataacatt tactattttt gaagactagt gagatttctg taataatttt aattctttaa 300
aaagtgaaag cttgttgtaa agatattttc tttttgttat tagaaggaaa tacaaagaga 360
aaaatttctt tctttcatgg ggcatttgat aatttcagtc tttgacgatt tgtaagccta 420
gaatatacta agctgaataa cagctctttg gcctcagaat tttccagtag ccagtawttc 480
yggattaact aagttggaaa cncytattag gaacctccag tggnga            526

<210> 33
<211> 555
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (494)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (521)
<223> n equals a,t,g, or c

<400> 33
ccggaccctg cacccagcga ctgggccccg cgcgcgccct ccgcgagggt ggaggcggcg 60
gctgtgtgcg cagggcccgg caccggactg ggaccctggc gtccctccag gccttgcctc 120
ctgcgggags acagtttggc ttcacttctc tgaccccagc ctcggccgta aagtgaaaga 180
gaccggacca gcttcagctt tcggactctg gttcttggat cgtgtcctct ccccctcgcc 240
gccctcttcc cccaatctga gccattkcag gcctctgcct gckgcccccct ctctcctcgg 300
gatcgggtcc ccagagccac catctcctga gcctcccacc ccgctgcctg ggccctgtgg 360
ttgctgggcc tcccacctca aggaggggaa ggttgtacag cccgaacccg tggagcaatg 420
ccctgtctgg cctccaaaac caaaataaaa ctgggtcact ttacaaaaaa aaaaaaaaaa 480
aagggcccgg gaanaccgga ccggtacctg caggcgtacc ngtttcccta tagtgagttg 540
tattagcgtt gcata                                              555
```

26

```
<210> 34
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c

<400> 34
gggtcgaccc acgcgtccgg accgcgcggc tagtggtgtg aggatctgag ccccgtggtg 60
gggggtggag gcggctcctg cratctaaag ggacttgaga ctctcaccgg ccgcgcgcca 120
tgagggccct gtgggtgctg ggcctctcct gcrtcctgct gaccttcggg tcggtccgar 180
ctgaygatga agtcgatgtg gatggtacag tggaagagga tctgggtaaa agtagagaag 240
gttcaaggac agatgatgaa gtagtacaga gagaggaaga agctattnca gttggatgga 300
ttaaatgcat cccaaataag agaacttnag agagnaagtc cagaaaa              347

<210> 35
<211> 750
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (701)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (731)
<223> n equals a,t,g, or c

<400> 35
gggtggcttc cttgtggttc ctcagtggtg cctgcaaccc ctggttcacc tccttccagg 60
ttctggctcc ttccagccat ggctctcaga gtccttctgt taacagcctt gaccttatgt 120
catgggttca acttggacac tgaaaacgca atgaccttcc aagagaacgc aaggggcttc 180
gggcagagcg tggtccagct tcagggatcc agggtggtgg ttggagcccc ccaggagata 240
gtggctgcca accaaagggg cagcctctac cagtgcgact acagcacagg ctcatgcgag 300
cccatccacc tgcaggtccc cgtggaggcc gtgaacatgt ccctgggcct gtccctggca 360
gccaccacca gcccccctca gctgctggcc tgtggtccca ccgtgcacca gacttgcagt 420
```

```
gagaacacgt atgtgaaagg gctctgcttc ctgtttggat ccaacctacg gcagcagccc 480
cagaagttcc cagaggccct ccgagggtgt cctcaagarg atagtgacat tgccttcttg 540
attgatggct ctggtagcat catcccacat gactttcggc ggatgaagga rtttgtctca 600
actgtgatgg agcaattaaa aaagtccaaa accttgttct ctttgatgca gtactctgaa 660
gaattccgga ttcactttac ttcaaagagt tccagaacaa ncctaaccca agatcactgg 720
tgaagccaat nacgcagctg cttggggcgg                                   750


<210> 36
<211> 1291
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (695)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (795)
<223> n equals a,t,g, or c


<400> 36
aagaaaaatg tactacgcct gtcctgtang aagctgaaga tttttgcaat gcccatgcag 60
gatatcaaga tgatcctgaa aatggtgcag ctggactcta ttgaagattt gggaagtgac 120
ttgtacctgg aagctaccca ccttggcgaa attttctcct tacctgggcc agatgattaa 180
tctgcgtaga ctcctcctct cccacatcca tgcatcttcc tacatttccc cggagaagga 240
agagcagtat atcgcccagt tcacctctca gttcctcagt ctgcagtgcc tgcagctnct 300
ctatgtggac tctttatttt tccttagagg ccgcctggat cagttgctca ggcacgtgat 360
gaaccccttg gaaaccctct caataactaa ctgccggctt cggaagggg atgtgatgca 420
tctgtcccag agtcccagcg tcagtcagct aagtgtcctg agtctaagtg gggtcatgct 480
gaccgatgta agtcccgagc ccctccaagc tctgctggag agagcctctg ccaccctcca 540
ggacctggtc tttgatgagt gtgggatcac ggatgatcag ctccttgccc tcctgccttc 600
cctgagccac tgctcccagc ttacaacctt aagcttctac gggaattcca tctccatatc 660
tgccttgcag agtctcctgc agcacctcat cgggntgagc aatctgaccc acgtgctgta 720
tcctgtcccc ctggagagtt atgaggacat ccatggtamc ctccamctgg agaggttgct 780
atctgcatgc caggntcagg gagttgctgt gtggarttgg gcggcccagc atggttctgg 840
cttagtgggc aacccctgtc ctcactgtgg ggacagaacc ttctatgacc cggagcccat 900
cctgtgcccc tgtttcatgc ctaatarctg ggtgcacata tcaaatgctt cattctgcat 960
acttggacac taaagccagg atgtgcatgc atcttgaagc aacaaagcag ccacagtttc 1020
agacaaatgt tcagtgtgag tgaggaaaac atgttcagtg aggaaaaaac attcagacaa 1080
```

28

```
atgttcagtg aggaaaaaaa ggggagttgg ggataggcag atgttgactt grggagktaa 1140
tgtgatcttt ggggagatac atcttataga gttagaaata gaatctgaat ttctaaaggg 1200
agawtctggc ttgggaagta catgtaggag ttaatccctg tgtagactgt tgtaaagaaa 1260
ctgttgaaaa taaagagaag caatgtgaag c                              1291
```

<210> 37
<211> 1535
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1413)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1526)
<223> n equals a,t,g, or c

<400> 37
```
ggcacgaggg tacgcagagc ttcgtcttcc agcgcgaaga gatagcgcag ttggcgcggc 60
agtacgctgg gctggaccac gagctggcct tctctcgtct gatcgtggag ctgcggcggc 120
tgcacccagg ccacgtgctg cccgacgagg agctgcagtg ggtgttcgtg aatgcgggtg 180
gctggatggg cgccatgtgc cttctgcacg cctcgctgtc cgagtatgtg ctgctcttcg 240
gcaccgcctt gggctcccgc ggccactcgg ggcgctactg ggctgagatc tcggatacca 300
tcatctctgg caccttccac cagtggagag agggcaccac caaaagtgag gtcttctacc 360
caggggagac ggtagtacac gggcctggtg aggcaacagc tgtggagtgg gggccaaaca 420
catggatggt ggagtacggc cggggcgtca tcccatccac cctggccttc gcgctggccg 480
acactgtctt cagcacccag gacttcctca ccctcttcta tactcttcgc tcctatgctc 540
ggggcctccg gcttgagctc accacctacc tctttggcca ggacccttga ccagccaggc 600
ctgaaggaag acctgcggat ggacaggagc gggcaggccc gcacatatcc acttgctgga 660
gcccatgttt acagacaggg acatacacca tgcagatcct gagttcctgc tgtatgagca 720
gggatatcca tgcttatgta tccaaacaca gagacccatg ggaacaaatg agacacatat 780
agatactgag acctgtgtgt acagtaggac catgcactca cacccatctg gagagggagc 840
ccccggtata ccaagggagc cagttgtgtt cagacacaca catcacagct tgactcacta 900
actgaggcct ttccatagct ccacagcttc ccacctcctc cccaccaaac cggggttcta 960
gagttaagga tgggggaggg tattatactg cctcagtctg actcctcaac ccagcagcaa 1020
tttgagggga tgaggggaa gaggagctgc cttttggagg cccccttcac ctgcagctat 1080
gatgcccttc cccttctccc ctgtcctcac catatgcctt atccccattc tactcccctg 1140
ctatgcaagt gccctgtgg cttgtcccca accccctcag caacaaagct cagctgggga 1200
acgagagtaa tttgaagaat gcttgaagtc agcgtcttcc attccagaaa gaccccatt 1260
cttcctttgg gggtatgatg tggaagctgg tttcagccca ggacccacca ctgaggagag 1320
gatctagaca ggtgggccta attccaaggg gcccttcctg gcctggagaa ggccttttac 1380
acacacacaa cacatacaca cacacacaca canacacata tcacagtttt cacacagccc 1440
ctgctgcatt ctctgtccat ctgtctgttt ctattaataa agatttgttg atctgttcca 1500
aaaaaaaaaa aaaaaaaaaa aaaaangggg gggct                          1535
```

<210> 38
<211> 295
<212> DNA

29

<213> Homo sapiens

<400> 38
ctggtcacac tattacatgc catgcaggca cgcgataaaa cgctggggct ggcaacactg 60
tgcattggcg gcggtcaggg aattgcgatg gtgattgaac ggttgaatta atcaataaaa 120
acacccgata gcgaaagtta tcgggtgttt tcttgaacat cgacggcgaa ggtaacccca 180
ttaatcacca gtcaaaactt ttcaccagcg tcactcgcca gcattacgca tcggtacaat 240
aaatgtttcc tgtttctcat tgaccgatcc ttcatcggtg atcagcgtca ttggg   295

<210> 39
<211> 1300
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (641)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1297)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1298)
<223> n equals a,t,g, or c

<400> 39
gcggactggc aggggggcagg gaagctcaaa gatctggggt gctgccagga aaaagcaaat 60
tctggaagtt aatggttttg agtgattttt aaatccttgc tggcggagag gcccgcctct 120
ccccggtatc agcgcttcct cattctttga atccgcggct ccgcggtctt cggcgtcaga 180
ccagccggag gaagcctgtt tgcaatttaa gcgggctgtg aacgcccagg gccggcgggg 240
gcggggccga ggcgggccat tttraataaa gaggcgtgcc ttccaggcag gctctataag 300
traccgccgc ggcgagcgtg cgcgckttgc aggtcactgt agcgggactt cttttggttt 360
tctttctctt tggggcacct ctggactcac tccccagcat gaaggcgctg agcccggtgc 420
gcggctgcta cgaggcggtg tgctgcctgt cggaacgcag tctggccatc gcccgggggcc 480
gagggaaggg cccggcagct gaggagccgc tgagcttgct ggacgacatg aaccactgct 540
actcccgcct gcggraactg gtacccggag tcccgagagg cactcagctt agccaggtgg 600
aaatcctaca gcgcgtcatc gactacattc tcgacctgca ngtagtcctg gccgagccag 660
cccctggacc ccctgatggc ccccaccttc ccatccagac agccgagctc gctccggaac 720
ttgtcatctc caacgacaaa aggagctttt gccactgact cggccgtgtc ctgacacctc 780
cagaacgcag gtgctggcgc ccgttctgcc tgggaccccg ggaacctctc ctgccggaag 840
ccggacggca gggatgggcc ccaacttcgc cctgcccact tgacttcacc aaatcccttc 900
ctggagacta aacctggtgc tcaggagcga aggactgtga acttgtggcc tgaagagcca 960
gagctagctc tggccaccag ctgggcgacg tcaccctgct cccacccccac ccccaagttc 1020
taaggtctyt tcagagcgtg gaggtgtgga aggagtggct gctctccaaa ctatgccaag 1080
gcggcggcag agctggtctt ctggtctcct tggagaaagg ttctgttgcc ctgatttatg 1140
aactctataa tagagtatat aggttttgta ccttttttac aggaaggtga ctttctgtaa 1200
caatgcgatg tatattaaac tttttataaa agttaacatt ttgcataata aacgattttt 1260

30

```
aaacaaaaaa aaaaaaaaaa aaggggggcc gccctanngg                    1300

<210> 40
<211> 215
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c

<400> 40
cagaaacaga agttcacact aacagagtat ggttttaatt ttcctttgaa tgaaaaggat 60
agaaagataa aattgtgtat tgttaacatg taaataaaat tggagctaat ttgaaactag 120
cttctcaata acttcatctt tctagagact cattacctgt gggcttgtcm aacctggact 180
atttggccaa atwggttgga taaaaaaggn atntt                         215

<210> 41
<211> 474
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c

<400> 41
tcgacccacg cgtccgggag actacggtaa aggcgcgcgc acgcagccaa catgccggtg 60
gcccggagct gggtttgtcg caagnctacg tgacccctcg gaggcccttt gagaagtcgc 120
```

```
ggctcgacca agagctgaag ctgataggcg agtacgggct ccggaacaaa cgtgaggtgt 180
ggagggtcaa gttcaccctg gccaagatcc gcaagnccgc gcgggarctg ctgacgctgg 240
acgagaagga cccgcggcgc ctgtttgagg gcaatgcctt gcttcggcga ctggtgcgca 300
ttggagtgct ggacgagggc aagatgaagc tggattatat cctgggtctg aagatgagga 360
ttcttggaga grcntctgca gacccaggty tttcaagctg gggttggcca atccatccac 420
catgccctgt gctgatccgc caggccacnc aggtccgaaa gcaagtggtg aaca      474
```

<210> 42
<211> 425
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c

<400> 42
```
cctcgccttc gatgaatatg ggcgcccttt cctcatcatc aaggatcagg atcgcaagtc 60
tcgtcttatg ggactggagc tctcaagtct catatcatgg cggcaaaggc tgtagcaaat 120
accatgagaa catcacttgg accaaatgga cttgataaaa tgatggtgga caaggacggc 180
gacgtgacgg tcacaaacga cggtgccacg attctgagca tgatggatgt cgatcaccag 240
attgccaagc tgatggtgga gctgtccaaa tcccaggatg atgaaatcgg agatggggac 300
cacggggggtg gttgtcctgg ccggcgccct gctggaagga ggccgagcag ctgctggacc 360
gcggcattca mccgntcagg atcgccgacg gttacgagca ggntgcccgc attggccntc 420
gagca                                                             425
```

<210> 43
<211> 1187
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c

```
<220>
<221> misc feature
<222> (1149)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1156)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1160)
<223> n equals a,t,g, or c

<400> 43
tgtgggaact ggtgggtccc ccgggctggc agnaattggg nacgcgggtc gcggttcttg 60
tttgtggatc gctgtgatcg tcacttgaca atgcagatct tcgtgaagac tctgactggt 120
aagaccatca ccctcgaggt tgagcccagt gacaccatcg agaatgtcaa ggcaaagatc 180
caagataagg aaggcatccc tcctgaccag cagaggctga tctttgctgg aaaacagctg 240
gaagatggkc gcaccctgtc tgactacaac atccagaaag agtccaccyt gcacctggtr 300
ctccgtctca gaggtgggat gcaaatcttc gtgaagacac tcactggcaa gaccatcacc 360
cttgaggtcg agcccagtga cacyatcgag aacgtcaaag caaagatcca rgacaaggaa 420
ggcattcctc ctgaccagca gaggttgatc tttgccggaa agcagctgga agatgggcgc 480
accctgtctg actacaacat ccagaaagag tctaccctgc acctggtgct ccgtctcaga 540
ggtgggatgc agatcttcgt gaagaccctg actggtaaga ccatcacyct cgargtggag 600
ccgagtgaca ccattgagaa tgtcaaggca aagatccaag acaaggaagg catccctcct 660
gaccagcaga ggttgatctt tgctgggaaa cagctggaag atggacgcac cctgtctgac 720
tacaacatcc agaaagagtc caccctgcac ctggtgctcc gtcttagagg tgggatgcag 780
atcttcgtga agaccctgac tggtaagacc atcactctcg aagtggagcc gagtgacacc 840
attgagaatg tcaaggcaaa gatccaagac aaggaaggca tccctcctga ccagcagagg 900
ttgatctttg ctgggaaaca gctggaagat ggacgcaccc tgtctgacta caacatccag 960
aaagagtcca ccctgcacct ggtgctccgt ctyagaggtg ggatgcagat cttcgtgaag 1020
accctgactg gtaagaccat cacyctcgaa gtggagccga gtgacaccat ygagaatgtc 1080
aaggcaagat ccagacaagg aaggcatcct cctgaccagc agargttgat tttgctggga 1140
aaarcttgna atggncgan cccttttgat taaaatcccg aaagttc            1187
```

```
<210> 44
<211> 515
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (465)
```

33

<223> n equals a,t,g, or c

<400> 44
ctgcagtacc gtccgaattc ccgggtcgac ccacgcgtcc ggtttgagcc gtcgtgcttc 60
accggtctac ctcgctagca tgtcgggccg cggcaagact ggcggcaagg cccgcgccaa 120
ggccaagtcg cgctcgtcgc gcgccggcct ccagttccca gtgggccgtg tacaccggct 180
gctgcggaag ggccactacg ccgagcgcgt tggcgcnggc rcgccagtgt acctggcggc 240
agtgctggag tacctcaccg ctgagatcct ggagctggcg ggcaatgcgg cccgcgacaa 300
caagaagacg cgaatcatcc cccgccacct gcagctggcc atccgcaacg acgaggagct 360
caacaagctg ctgggcggcg tgacgatcgc ccaggaagg cgtyctgccc aacatccagg 420
ccgtgsttgy tgcccaagaa gaccagcgcc accgtggggc cgaangccct tcggggggca 480
agaaagggca accaaggctt cccaaggagt actaa   515

<210> 45
<211> 1499
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1476)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1492)
<223> n equals a,t,g, or c

<400> 45
gcgagtgcgc gctcctcctc gcccgccgct aggtccatcc cggcccagcc accatgtcca 60
tccacttcag ctccccggca tccgcgaggt caccattaac cagagcctgc tggcccccgct 120
gcggctggac gccgacccct ccctccagcg ggtgcgccag gaggagagcg agcagatcaa 180
gaccctcaac aacaagtttg cctccttcat cgacaaggtg cggtttctgg agcagcagaa 240
caagctgctg gagaccaagt ggacgctgct gcaggagcag aagtcggcca agagcagccg 300
cctcccagac atctttgagg cccagattgc tggccttcgg ggtcagcttg aggcactgca 360
ggtggatggg ggccgcctgg aggcggagct gcggagcatg caggatgtgg tggaggactt 420
caagaataag tacgaagatg aaattaaccg ccgcacagct gctgagaatg agtttgtggt 480
gctgaagaag gatgtggatg ctgcctacat gagcaaggtg gagctggagg ccaaggtgga 540
tgccctgaat gatgagatca acttcctcag gaccctcaat gagacggagt tgacagagct 600
gcagtcccag atctccgaca catctgtggt gctgtccatg acaacagtc gctccctgga 660
cctggacggc atcatcgctg aggtcaaggc rcagtatgag gagatggcca aatgcagccg 720
ggctgaggct gaagcctggt accagaccaa gtttgagacc ctccaggccc aggctgggaa 780
gcatggggac gacctccgga atacccggaa tgagatttca gagatgaacc gggccatcca 840
gaggctgcag gctgagatcg acaacatcaa gaaccagcgt gccaagttgg aggccgccat 900
tgccgaggct gaggagcgtg gggagctggc gctcaaggat gctcgtgcca agcaggagga 960
gctggaagcc gccctgcagc gggccaagca ggatatggca cggcagctgc gtgagtacca 1020
ggaactcatg agcgtgaagc tggccctgga catcgagatc gccacctacc gcaagctgct 1080
ggagggcgag gagagccggt tggctggaga tggagtggga gccgtgaata tctctgtgat 1140
gaattccact ggtggcagta gcagtggcgg tggcattggg ctgaccctcg ggggaaccat 1200
gggcagcaat gccctgagct tctccagcag tgcgggtcct gggctcctga aggcttattc 1260
catccggacc gcatccgcca gtcgcaggag tgcccgcgac tgagccgcct cccaccactc 1320

34

```
cactcctcca gccaccaccc acaatcacaa gaagattccc acccctgcct cccatgcctg 1380
gtcccaagac agtgagacag tctggaaagt gatgtcagaa tagcttccaa taaagcagcs 1440
tcattctgag gcctgagtga aaaaaaaaaa aaaaanaaaa aaaaaaattt tnggggggg  1499
```

```
<210> 46
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c

<400> 46
tcgacccacg cgtccggcag cctttctgag ggagcggttg tgtgttcgcc atcttaggaa 60
gaagatgttc tcgtccgtgg cgcatctggc cgggcgaacc ccttcaacgc gccccacctg 120
cagctggtac acgatggcct cacgggcacc gaagcagccc cgtgggnacc cccgggcncg 180
ccccgaacgt tcccgcaatc tggcagcagc cgctgtggna agagtacagt tgcgaatatg 240
gctccatgaa gttttatgca ctgtgtggct ttggtggggt cttaagttgt ggtctgacac 300
acactgctgt cgttcctctg gatttagtga aatgccgaat gcargtggac ccccagaant 360
acaagggcak wnttaatngg attctcatta aca                              393
```

```
<210> 47
<211> 238
<212> DNA
```

35

<213> Homo sapiens

<400> 47
cggatcccgg ctcctgcatc cagtcgccat tcgggaggcc gctgcgctgc agggcctcgc 60
ggaccgcccg cgaccgcgag ccgggccctc cgcgcggtcc atcgcccact ggacgccgcc 120
cgcggccgga ccggttcaac ttctcatctt tgttcttctt catatactat aggctgtttg 180
ctgtggttta gtcaaaaagc catgtagaat gcctgccttt tgaagaccac ttttaagg   238

<210> 48
<211> 939
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (937)
<223> n equals a,t,g, or c

<400> 48
gccaccatct tggaacggga ggcggagcag agtcgactgg gagcgaccga gcgggccgcc 60
gccgccgcca tgaaccccga atatgactac ctgtttaagc tgcttttgat tggcgactca 120
ggcgtgggca agtcatgcct gctcctgcgg tttgctgatg acacgtacac agagagctac 180
atcagcacca tcgggggtgga cttcaagatc cgaaccatcg agctggatgg caaaactatc 240
aaacttcaga tctgggacac agcgggccag gaacggttcc ggaccatcac ttccagctac 300
taccggggggg ctcatggcat catcgtggtg tatgacgtca ctgaccagga atcctacgcc 360
aacgtgaagc agtggctgca ggagattgac cgctatgcca gcgagaacgt caataagctc 420
ctggtgggca acaagagcga cctcaccacc aagaaggtgg tggacaacac cacagccaag 480
gagtttgcag actctctggg catccccttc ttggagacga gcgccaagaa tgccaccaat 540
gtcgagcagg cgttcatgac catggctgct gaaatcaaaa agcggatggg gcctggagca 600
gcctctgggg gcgagcggcc caatctcaag atcgacagca cccctgtaaa gccggctggc 660
ggtggctgtt gctagsaggg gcacatggag tgggacagga gggggcacct tctccagatg 720
atgtccctgg aggggggcagg aggtacctcc ctctccctct.cctggggcat ttgagtctgt 780
ggctttgggg tgtcctgggc tccccatctc cttctggccc atctgcctgc tgccctgagc 840
cccggttctk tmagggtccc taaaggagga cactcagggc ctgtggcagg cagggcggag 900
gctgcttgtg ctgttgcctc taagtgaatt tccaaangc   939

<210> 49
<211> 1771
<212> DNA
<213> Homo sapiens

<400> 49
tctgaggctc ctggggagtc ggtgggaacg acaccagaag ctcagatgaa gactggccca 60
tttgcagagc actccaacca gctgtggaac atcagcgccg tcccttcctg gtccaaagtg 120
aaccagggtc tcatccgcat gtataaggcc gagtgcctgg agaagttccc tgtgatccag 180
cacttcaagt tcgggagcct gctgcccatc catcctgtca cgtcgggcta ggaggggcca 240
agccgaagag ccacccaggc cacagttcct gtgcctgcct tccccacccc agcagtggcc 300
cctccccatc ccctccctct gttcgtcccg tttgatgaga ggctgtttac tggggtgggg 360
tggcgagatg ggcttgaggg ggctcagagc ataaggcttc agggcccaag ttgggagaag 420
tgaccaaagt gtagccagtt ttctgagttc ccgtgtgcta gactggccag aagagagggt 480
ctggggcctg gtcactcggc cactctctcc tgtttctggc ctcttctccc ttcactcccg 540

36

```
tccagtctgg ttttgagagc aggggctgtt ctgcagcacc kcagggaagg gaggagagat 600
acctgctgct tccattgctt ttcccttcct ggagtcgatg cctttctaag ggttggagct 660
gctccttgca ggggcgggtc agtttcccag gccatgccgg ggtggccatc tatgctaggg 720
ctggaagctg aggctggccg ccagctgtgg gctggggtgg ggtgggtggg gtcgggtggt 780
ggagaggcct tagctgtcct ggctggtgcc cctcccaggc tccttttcac cctgcccccT 840
gggcctgagg ccccctgtgt ccaagcctcc ccctggctct tcagttctct agcccttggc 900
tttgctgggt ttcctgactg tagccacatc tctcccgctc cctaagggta acctagccaa 960
tggaagctgc cctttgggta ggtgctgggc tcctgggagg gcccagatga tggggtgagg 1020
catgtctttc cagaactttc cctggcaggg aggggatggc agaaactcag ggaggggctt 1080
ggggcccatt gtatctggag agcctggatt cctcttggca gtcttaggcc crgccacttc 1140
tgctaccttt gcgctgctgt gagcctcacc ctgggcccct gggccctgct tctctgctcc 1200
cctgggtgat gggtgggccc agaaggtggc agtcccacac cttgtcctcc cacctccctg 1260
aactgtccat tgcttttata gggtgaggta agwgacagcc tcccaagccc aggctttggc 1320
actcagaatg ggcccagtgg gggctgggca ggcccattga gggccaccgc cgaggtttct 1380
cctaggggctg ttcctgggcc tggctcttac aggctcgtcc cccaggcctg cccttctcca 1440
ctgcccccctc ctgtgtctgg gtccacacac ccttcaggaa gggggagcac tgagaagcac 1500
agcacagggg ctcagcctgg gatccggtga tggtctgggc agaggctggg tcaggagtcc 1560
caaaggtcag tgacagtttc tcagaagagg cccagcgtcc acctctctcc cagggccaga 1620
cacccccttcc tggctccccc atccccctat ggctcccagc cccttgcacc ctcattgctg 1680
ttcagattaa agcctctgtt ttgcacctgt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaaaaaa aaaaaaaaa aaaaaaattt t                                  1771
```

```
<210> 50
<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c

<400> 50
gggtcgaccc acgcgtccgc tcgctccggg atcgcccgcg ctagagacgc atagcgctct 60
aatcgctcgc acgcaccggc cctcgctcgc tcgcccgtcc gtgccgccgc cgcccagccc 120
accgccaccc tttgcagcca tgtccaccag gtcygtgtcc tcgtcytcct accgcagatg 180
ttcggcggcc ccggcaccgg nagcggnccg agctccacgc gcataacgtg accagtccac 240
ccgcacctac agcctgggca gcgcctgcgc cccagcacca gccgcagcct ctamamctcg 300
tccccgggcg gcgcgtatgt tcacggctcc ttccgcggtg cgcctgcgga anatgttgcc 360
ccggcgttgc gcttgctggc aggattccgt ggaattt                           397
```

37

```
<210> 51
<211> 1635
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1422)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1617)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1620)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1629)
<223> n equals a,t,g, or c

<400> 51
gcccacgcgt ccgcccacgc gtccgcccac gcgtccgcct ctccagccct tctcctgtgt 60
gcctgcctcc tgccgccgcc accatgacca cctccatccg ccagttcacc tcctccagct 120
ccatcaaggg ctcctccggc ctggggggcg gctcgtcccg cacctcctgc cggctgtctg 180
gcggcctggg tgccggctcc tgcaggctgg gatctgctgg cggcctgggc agcaccctcg 240
ggggtagcag ctactccagc tgctacagct ttggctctgg tggtggctat ggcagcagct 300
ttggggtgt tgatgggctg ctggctggag gtgagaaggc caccatgcag aacctcaatg 360
accgcctggc ctcctacctg gacaaggtgc gtgccctgga ggaggccaac actgagctgg 420
aggtgaagat ccgtgactgg taccagaggc aggccccggg gcccgcccgt gactacagcc 480
agtactacag gacaattgag gagctgcaga acaagatcct cacagccacc gtggacaatg 540
ccaacatcct gctacagatt gacaatgccc gtctggctgc tgatgacttc cgcaccaagt 600
ttgagacaga gcaggccctg cgcctgagtg tggaggccga catcaatggc ctgcgcaggg 660
tgctggatga gctgaccctg gccagagccg acctggagat gcagattgag aacctcaagg 720
aggagctggc ctacctgaag aagaaccacg aggaggagat gaacgccctg cgaggccagg 780
tgggtggtga gatcaatgtg gagatggacg ctgccccagg cgtggacctg agccgcatcc 840
tcaacgagat gcgtgaccag tatgagaaga tggcagagaa gaaccgcaag gatgccgagg 900
attggttctt cagcaagaca gaggaactga accgcgaggt ggccaccaac agtgagctgg 960
tgcagagtgg caagagtgag atctcggagc tccggcgcac catgcaggcc ttggagatag 1020
agctgcagtc ccagctcagc atgaaagcat ccctggaggg caacctggcg gagacagaga 1080
accgctactg cgtgcagctg tcccagatcc aggggctgat ggcagcgtg gaggagcagc 1140
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tgaagacgcg gctggagcag gagattgcca cctaccgccg cctgctggag ggagaggatg 1260
cccacctgac tcagtacaag aaagaaccgg tgaccacccg tcaggtgcgt accattgtgg 1320
aagaggtcca ggatggcaag gtcatctcct cccgcgagca ggtccaccag accacccgct 1380
gaggactcag ctaccccggc cggccaccca ggaggcaggg angcagccgc cccatctgcc 1440
ccacagtctc cggcctctcc agcctcagcc ccctgcttca gtcccttccc catgcttcct 1500
```

38

```
tgcctgatga caataaagct tgttgactca gctaaaaaaa aaaaaaaaaa aaaaaaaaaa 1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanttn 1620
gggggggggnc ccccc                                                    1635


<210> 52
<211> 1780
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1780)
<223> n equals a,t,g, or c

<400> 52
ccgccgccgc cgccgccgcc ggagctctgt agtatggcat cgaggagaat ggagaccaaa 60
cctgtgataa cctgtctcaa aaccctcctc atcatctact ccttcgtctt ctggatcact 120
ggggtgatcc tgctggctgt tggagtctgg ggcaaactta ctctgggcac ctatatctcc 180
cttattgccg agaactccac aaatgctccc tatgtgctca tcggaactgg caccactatt 240
gttgtctttg gcctgtttgg atgctttgct acatgtcgtg gtagcccatg gatgctgaaa 300
ctgtatgcca tgtttctgtc cctggtgttc ctggctgagc tcgtagctgg catttcaggg 360
tttgtgtttc gtcatgagat caaggacacc ttcctgagga cttacacgga cgctatgcag 420
acttacaatg gcaatgatga gaggagccgg gcagtggacc atgtgcagcg casctgagct 480
gctgtggtgt gcagaactac accaactgga gcaccagccc ctacttcctg gagcatggca 540
tccccccccag ctgctgcatg aacgaaactg attgtaatcc ccaggatcta cacaatctga 600
ctgtggccgc caccaaagtt aaccagaagg gttgttatga tctggtaact agtttcatgg 660
agactaacat gggaatcatc gctggagtgg cgtttggaat cgcattctcc cagttaattg 720
gcatgctgct ggcctgctgt ctgtcccggt tcatcacggc caatcagtat gagatggtgt 780
aaggagaagt ctttcaagaa tgacggaata agagacctgt tttaaaaagg aactgcagca 840
atctttgaaa gacttccaaa gaatgttaga gcacagtaca taatacactt gccctgctcc 900
ctctmccccct taccccacaa cgtgcaactg acactcccac ccagtctctg ctccaccttt 960
cagcccacgt cacgtgtagt gtccattttg tgaagccctg ttgtgccaca gagtgtagcc 1020
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tccatctgta cttggtccaa ctgcaactca tcatcggtga ctggttatca caccatcgct 1140
ggcccctttg ggccctgcat gtagtgtggg aggctcctgt tagctcctca ctgtggtaaa 1200
tgccacacac ctttaagtag ataagcagac gatagttatc tgttctttttg acttaatctc 1260
atttggtttg attttccctc tactaaggct ttcctacctt cttcaggctg cctaagacat 1320
gtaacgaaac acttcaataa ttgtccatga ggagaaaaaa agcatgtgtc atgcatgaag 1380
gaaactgaac ttgaggtggc ctccttgctt gttacatacc tgggtatgtg taggcagttt 1440
agtgcatctt tgcctctcag ttgaaacctg tataaccctg ttacaaagct gtgttgttgc 1500
ttcttgtgaa ggccatgata ttttgttttt ccccaattaa ttgctattgt gttattttac 1560
tacttctctc tgtatttttt cttgcattga cattatagac attgaggacc tcatccaaac 1620
aatttaaaaa tgagtgtgaa gggggaacaa gtcaaaatat ttttaaaaga tcttcaaaaa 1680
taatgcctct gtctagcatg ccaacaagaa tgcattgata ttgtgaacat ttgtgatata 1740
tgtattaata aatagagcaa ttacaagcaa aaaaaaatgn                         1780


<210> 53
<211> 490
<212> DNA
<213> Homo sapiens
```

<400> 53
aattcggcag agaattttca tgagtcgcct tcaaaactct cgtgtagggt tgacaatgtg 60
ggggggtggg ggatccagct tattctttta ttttcaagtc cattcttggg gctggtgggg 120
aggcaggaga atacccctcc ctaagccctt agtgtgtgcc gagcttgctt tgtgatgttg 180
gcaggggagg ggagacctgg gtggtgactg agttcccttt atcaaaccct tcaatgggca 240
caaaattgag tgcttgattt taggttttat ttttttatga atgtccaaat ctgtgtttcc 300
ccctgccctc ccagactgtg tggccagttg aaagtgtctg gtttgtgttc atctctccct 360
catttctgga gcagggcctg agaccctgcc acatctccta tgctctgcat ccacgcctct 420
tttggacatt aaaggttgat tgatgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
aaaaaaaaaa   490

<210> 54
<211> 1944
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (466)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (634)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1308)
<223> n equals a,t,g, or c

<400> 54
acggtacgga attcccgggt cgacccacgc gtccgacccc ggacccggag tcgcggagag 60
ctgggcagtg ttggccgctg gcggagcgct ggggcagcat gaagtgcctg gtcacgggcg 120
gcaacgtgaa ggtgctcggc aaggccgtcc actccctgtc ccgcatcggg gacgagctct 180
acctggaacc cttggaggac gggctctccc tccggacggt gaactcctcc cgctctgcct 240
atgcctgctt tctctttgcc ccgctcttct tccagcaata ccaggcagcc accctggtc 300
aggacctgct gcgctgtaag atcctgatga agtctttcct gtctgtcttc cgctcactgg 360
cgatgctgga gaagacggtg gaaaaatgct gcatctccct gaatggccgg arcagccgcc 420
tggtggtcca gctgcattgc aagttcgggg tgcggaagat camaanctgt ccttcmagga 480
ctgtgagtcc ctgcaggccg tcttcgaccc agcctcgtgc ccccacatgc tccgcgcccc 540
agcacgggtt ctgggggarg ctgttctgcc cttctctcct gcactggctg aagtgacgct 600
gggcattggc cgtggcgcag gktcatcctg gcantaccac gaggaggagg cagacagcac 660
tgccaaagcc atggtgactg agatgtgcct tggagaggag gatttccagc agctgcaggc 720
ccaggaaggg gtggccatca ctttctgcct caaggaattc cgggggctcc tgagctttgc 780
agagtcagca aacttgaatc ttagcattca ttttgatgct ccaggcaggc ccgccatctt 840
caccatcaag gactctttgc tggacggcca ctttgtcttg gccacactct cagacaccga 900
ctcgcactcc caggacctgg gctccccaga gcgtcaccag ccagtgcctc agctccaggc 960
tcacagcaca ccccacccgg acgactttgc caatgacgac attgactctt acatgatcgc 1020
catggaaacc actataggca atgagggctc gcgggtgctg ccctccattt cccttttcacc 1080
tggcccccag ccccccaaga gccccggtcc ccactccgag gaggaagatg aggctgagcc 1140

40

```
cagtacagtg cctgggactc ccccacccaa gaagttccgc tcactgttct tcggctccat 1200
cctggcccct gtacgctccc cccagggccc cagcctgtgc tggcggaaga cagtgagggt 1260
gaaggctgaa ccaagaacct gaagcctgta cccagaggcc ttggactnag acgaagcccc 1320
agccagtggc agaactgggt ctctcagccc tggggatcag aaaggtgggc ttgctggagc 1380
tgagctgttt cactgcctct cgcaggcccc agctggctgt cactgtaaag ctgtcccaca 1440
gcggtcgggc ctgggccgtt atctccccac aamccccarc caatcaggac tttccagact 1500
tggccctgaa ctactgacgt tcctacctct tatttctcat tgagcctcag gctatactcc 1560
agctggccaa ggctggaaac ctgtctccct caggctcacc ttcctaagga aaatgtcata 1620
gtaggtgctg ctggcccctg gtgatccagc ttctctgcca atcatgacct gttccttcct 1680
gaagtcctgg gcatgcatct gggacccccg tggagctgac aagtttcct tgctttcctg 1740
atactctttg gcgctgactt ggaattctaa gagccttgga cccgagtgtg tggctagggt 1800
tgccctggct ggggcccggt gccgagactc ccaagcggst ctgtgcagaa gagctgccag 1860
gcagtgtctt agatgtraga cggaggccat ggcgagaatc cagctttgac ctttattcaa 1920
gagaccagat gggtttgccc cagg                                        1944
```

<210> 55
<211> 994
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (896)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (971)
<223> n equals a,t,g, or c

<400> 55
```
cccccgtgcg cagtaccggg tccgcgcctg tccccgaaac ttcgcacccc gtcgaactct 60
cgcgagagcg ktatctgcgt gtcgggacgt gcggaggctc tcactttccg tcatggcgct 120
gaaggtagcg accgtcgccg gcagcgccgc gaaggcgtgc tcgggccagc ccttctctgc 180
cgtccctggg aggttctagg cgcccacgag gtcccctcga ggaacatctt ttcagaacaa 240
acaattcctc cgtccgctaa gtatggcggg cggcacacgg tgaccatgat cccaggggat 300
ggcatcgggc cagagctcat gctgcatgtc aagtccgtct tcaggcacgc atgtgtacca 360
gtggactttg aagaggtgca cgtgagttcc aatgctgatg aagaggacat tcgcaatgcc 420
atcatggcca tccgccggaa ccgcgtggcc ctgaagggca acatcgaaac caaccataac 480
ctgccaccgt cgcacaaatc tcgaaacaac atccttcgca ccagcctgga cctctatgcc 540
aacgtcatcc actgtaagag ccttccaggc gtggtgaccc ggcacaagga catagacatc 600
ctcattgtcc gggagaacac agagggcgag tacagcagcc tggagcatga gagtgtggcg 660
ggagtggtgg agagcctgaa gatcatcacc aaggccaagt ccctgcgcat tgccgagtat 720
gccttcaagc tggcgcagga gagcgggcgc aagaaagtga cggccgtgca caaggccaac 780
atcatgaaac tgggcgatgg gcttttcctc cagtgctgca gggaggtggc agcccgytac 840
cctcagwtca ccttcgagaa catgattgtg gataacacca ccatgcagct ggtgtnccgg 900
ccccagcagt ttgatgtcat ggtgatgccc aatctctatg caacatcgt caaacaatgt 960
ctgcgcggga ntggtcgggg gcccaagctt gttg                             994
```

<210> 56
<211> 328

41

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<400> 56
gggtcgaccc acgcgtccgc ccacgcgtcc ggatgacttc attgccaaag ttgttcaaag 60
gtagccttgg ccctttttca tctgagtccc atttagagat gtataaagaa tgttgttgag 120
tanggcgcgg tggctcacgc ctgtaatccc cacacnttgg gaaggccgan gcaggcggat 180
cacgaggtca gaagattgag accattctgg ctaacatggt gaaccccat ctctactaaa 240
aatacaaaaa ttagtcaggc gcgatggcgg gcacatgtag taccagctac tcgggaggct 300
gatgcagaag aataacttgg aacctggg                                   328

<210> 57
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (710)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1109)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1117)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1206)
<223> n equals a,t,g, or c
```

42

<220>
<221> misc feature
<222> (1211)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1218)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1264)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1311)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1446)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1467)
<223> n equals a,t,g, or c

<400> 57
cggcacgagg ggtggtgtgg gtgtgtttag aaaaaagatg cattcctgaa gatctctggt 60
gctgaagggc ctcgagttcc tttcagagac tgtatttgac acactttagg tacacacaaa 120
cgaatggtat cacatgcaat attttaatgg agcaatggga gaggctcttt gaaatggggt 180
ttgcatcttt ttgtaacatt ttgatttctc tggtgcctta ttcctacttg atgctggcac 240
tcacataccc acaagaagct gacacagaag tcagccttag gcgtgggggac atatgggtga 300
tgtttgagca tgcaggggcc atggggagtt tggtgtcagt tggtggagaa gggactagat 360
ggcatctctt agccgaggcc aacaggaact gcacaagtcc attatagtca aagttagcaa 420
ttttgatacg taaacacaat acttcattct tcctcatctg agctttcctt ccttcttcct 480
tttctatctc taccttctca taaaggtgct gctgctgctg ctaaggtgcc cggagtccag 540
aatgtccatt aatcactcag gcacgagcct ggcactgcca cgtcagcccc cagcatgacc 600
aaacccaggt ttctcttgct tggggctgag aactgtcaga tttttctcat caaaaatgtt 660
ttccaaggaa tcagtggatt acagtttttc tgcattgaaa atgcactttn aaaaaataaa 720
ttaaagctcc agactgttta aaatatacag agggagcagg ggaaagttaa gcatgtgcta 780
gtgtctgaac ccagttcagt ttatctccag ttgaaacgat atacactata ttatgtataa 840
atgtatacac acttcctata tgtatccaca tatatatagt gtatatatta tacatgtata 900
ggtgtgtata tgtgcatata tacacacatg cacataacaa aatcagatgc tcattacaaa 960
tccagatgct cattacaâaa ccagatgcta cacaaacagc agcagaggaa acaaggttgg 1020
actcttgcaa cagatcacaa aaaataaaaa cagctacttg cagtgacttt ggtcatttct 1080
gtatgttcat aaagaatgga tttgtaacna ggaaaanaag gaccagtgtt agtgaaaagg 1140
gaagatgggg cgaaccatct tgatccgatg cgaatccgta atggtctata tacatttcat 1200

```
cagtantcat ntagtcangt gattgattca gttctgctat gaaacattgt aacacgtacc 1260
cacnactgac aactactcgt gagcgttcat taggagtgac ctaactttgc ntgcctgctc 1320
atgggacgag ctccttaggt ggagataccg gggaatagag aaagatgcac gtctctgcgt 1380
tgtcgcgtgc tttgaggggc ggtctttacc ttccgtgttg gagtcctccc tgagtccggc 1440
gctggntgcg ggacacggcc cttctcngtg tcccaggcgc tgcctcatt      1489
```

```
<210> 58
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (550)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1242)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1250)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1260)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1263)
<223> n equals a,t,g, or c

<400> 58
aggtaatttg aattgagaga gagtaagtga cttgctgnaa aaagggttaa tcaacagcag 60
agctgggatt tgaacccata actctgtcaa agcctccact cctaactcct gttcatgctc 120
ctgtggagaa aatgcttgta gtaacatatt ttaaatgtac taacaagacc agtcatgggm 180
aaatgtttct gagacaaatc tctagtttat gatttaaaac agtacgtttt cttacgtgac 240
gaaaacaaaa agtgtgttaa tttgttccca gtggttgaag ttatttgcca acaattttac 300
tgtttctctt catctgttta taggatttct ctgcctcttc caaacttttc ctccctgaac 360
ctgaggggta agcattttat ttccctttag gaaaaacgtc agctgcttgt aaccactgtg 420
tttatgtcaa agcattcatt tttttttagga tatctgaaaa aatgccatat aagaraaaam 480
tctataaaac atctatwatt ttcgaaccca agtacactct tgcattctaw gctttaagtt 540
```

44

```
aaatgcaaan tcctttttcc ttcttcctgc tgcaagtact atctcatcct gatgctcaag 600
agtgtcaggg cctgggtttc caaacagaga ctaccctaaa attatttggc gagtagtact 660
ttacacaatt gcctctcccc cacaaatcat aattgtttca gtaaaatggt tacttggttt 720
ttccaagaaa aaactcgttt ttactcattt ttggcctgtt tgtttattta gaaactaatc 780
tggattcact ccctctggtt gatacccact caaaaaggac acttctgatt aagacggttg 840
aaactagaga tggacaggtt atcaacgaaa cttctcagca tcacgatgac cttgaataaa 900
aattgcacac actcagtgca gcaatatatt accagcaaga ataaaaaaga aatccatatc 960
ttaaagaaac agctttcaag tgcctttctg cagttttca ggagcgcaag atagatttgg 1020
aataggaata agctctagtt cttaacaacc gacactccta caagatttag aaaaaagttt 1080
acaacataat ctagtttaca gaaaaatctt gtgctagaat acttttaaa aggtattttg 1140
aataccatta aaactgcttt ttttttttcca gcaagtatcc aaccaacttg gttctgcttc 1200
aataaatctt tggaaaaact maaaaaaaaa aaaaaaaaam mnggggggggn gcccgggggtn 1260
ccnccggggg gcccaagttt tac                                           1283
```

<210> 59
<211> 740
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (696)
<223> n equals a,t,g, or c

<400> 59
```
agaaggagcg cggggaggac gtaccttgtg agatgcgagc cggccaacag cttgcaagca 60
tgctccgctg gacccgagcc tggaggctcc cgcgtgaggg actcggcccc cacggcccta 120
gcttcgcgag ggtgcctgtc gcacccagca gcagcagcgg cggccgaggg ggcgccgagc 180
cgaggccgct tccgctttcc tacaggcttc tggacgggga ggcagccctc ccggccgtcg 240
tcttttttgca cgggctcttc ggcagcaaaa ctaacttcaa ctccatcgcc aagatcttgg 300
cccagcagac aggccgtagg tgctgacggt ggatgctcgt aaccacggtg acagccccca 360
cagcccagac atgagctacg agatcatgag ccaggacctg caggaccttc tgccccagct 420
gggcctggtg ccctgcgtcg tcgttggcca cagcatggga ggaaagacag ccatgctgct 480
ggcactacag aggccagagc tggtggaacg tctcattgct gtagatatca gcccagtgga 540
aagcacaggt gtctcccact ttgcaaccta tgtggcagcc atgagggcca tcaacatcgc 600
agataggctt gccccgctcc cgtgcccgaa aactggcgga tgaacagctc agttctgtca 660
tccaggacat ggccgtgcgg cacacttgct tcaatnaacc tggtagaggt agacgggcgt 720
tttcgtgttg gagggtggaa                                               740
```

<210> 60
<211> 1291
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature

45

```
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1211)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1283)
<223> n equals a,t,g, or c

<400> 60
actttnnccc ctcccccttt cctttcccgt ctcacgcgcc aggccgcttg cacatgcgca 60
ttaggtacaa agcctcgctc tttgtcccca tctgtcgttc acacgaactc aagcctttgg 120
cattcggcag ccaatagaat ctaaganatg gcggaaaaat gattccgcct cgggagctaa 180
acttgattgg cagtttagct aaccaatcga gaacgccatt tgtamccctt ggcaggcamc 240
gagctccgtc gtctcgtttc cggcggtcgc gcgctctttt ctcgggacgg gagaggccgt 300
gtagcgtcgc cgttactccg aggagatacc agtcggtaga ggagaagtcg aggttagagg 360
gaactgggag gcactttgct gtctgcaatc gaagttgagg gtgcaaaaat gcagagtaat 420
aaaactttta acttggagaa gcaaaaccat actccaagaa agcatcatca acatcaccac 480
cagcagcagc accaccagca gcaacagcag cagccgccac caccgccaat acctgcaaat 540
gggcaacagg ccagcagcca aaatgaaggc ttgactattg acctgaagaa ttttagaaaa 600
ccaggagaga agaccttcac ccaacgaagc cgtctttttg tgggaaatct tcctcccgac 660
atcactgagg aagaaatgag gaaactattt gagaaatatg gaaaggcagg cgaagtcttc 720
attcataagg ataaaggatt tggctttatc cgcttggaaa cccgaaccct agcggagatt 780
gccaaagtgg agctggacaa tatgccactc cgtggaaagc agctgcgtgt gcgctttgcc 840
tgccatagtg catcccttac agttcgaaac cttcctcagt atgtgtccaa cgaactgctg 900
gaagaagcct tttctgtgtt tggccaggta gagagggctg tagtcattgt ggatgatcga 960
ggaaggccct caggaaaagg cattgttgag ttctcaggga agccagctgc tcggaaagct 1020
ctggacagat gcagtgaagg ctccttcctg ctaaccacat ttcctcgtcc tgtgactgtg 1080
gagcccatgg accagttaga tgatgaagag ggacttccag agaagctggt tataaaaaac 1140
cagcaatttc acaaggaacg agagcagcca cccagatttg cacagcctgg ctcctttkga 1200
gtatgaatat ngccatgcgc tgggaaggca ctcattgaga tggagaaagc agcctggggt 1260
gacaagaagt gaagactcct gtntccaaaa a                             1291

<210> 61
<211> 971
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (856)
<223> n equals a,t,g, or c
```

46

<220>
<221> misc feature
<222> (886)
<223> n equals a,t,g, or c

<400> 61
ctgcagtacc ggtccggaat tcccgggtcg acccacgcgt ccgggtctgt ggtcctctct 60
cggctcctcg cggctcgcgg cggccgacgg ttcctgggac acctgcttgc ttggcccgtc 120
cggcggctca gggcttctct gctgcgctcc cggttcgctg gacgggaaga agggctgggc 180
cgtcccgtcc cgtccccatc ggaaccccaa gtcgcgccgc tgacccgtcg cagggcgaga 240
tgagcgcgga cgcagcggcc ggggcgcccc tgccccggct ctgctgcctg gagaagggtc 300
cgaacggcta cggcttccac ctgcacgggg agaagggcaa gttgggccag tacatccggc 360
tggtggagcc cggctcgccg gccgagaagg cggggctgct ggcggggggac cggctggtgg 420
aggtgaacgg cgaaaacgtg gagaaggaga cccaccagca ggtggtgagc cgcatccgcg 480
ccgcactcaa cgccgtgcgc ctgctggtgg tcgacccccga dacggacgag cagctgcaga 540
agctcggcgt ccaggtccga gaggagctgc tgcgcgccca ggaagcgccg gggcaggccg 600
agccgccggc cgccgccrag gtgcagggggg ctggcaacga aaatrarcct cgcraggccg 660
acaagagcca cccggagcag cgcgagcttc ggcctcggct ctgtaccatg aagaagggcc 720
ccagtggcta tggcttcaac ctgcacagcg acaagtccaa gccaggccag ttcatccggt 780
cagtggaccc agactccccg gctgaggctt cagggctccg ggcccaggat cgcattgtgg 840
aggtgatgct tctcgnttct cttcctatct gaactgcccc caaccnctgc agattagcag 900
caccttgggg cagccatcat accatcatgg ggtttgatta gcccacgggc attagccaac 960
ctgggaggtt g   971

<210> 62
<211> 618
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (563)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (598)
<223> n equals a,t,g, or c

<400> 62
gggtcgaccc acgcgtccgg cagaaatgaa ggaccacctg ccaagacgaa gagctgggtg 60
ggacccacgc tgcattttca tcgaaagagt gaacatctag tgggactgaa agttctttgt 120
tgtttcagat tgtagagtgt gattgatgga attggtctgt ggaaattgca ttgtttttat 180
ttctttatgt aatcagttta agtaataggg ggtatatata atcgtaagta ttttaggggtg 240
ggaggggcta ttaagtaatt aagtgggtgg ggttagttta aaagttagca tgatatgtat 300
tagataactc tataagtgga catgtgtact tacttgtgat cctttacccct atgattgcta 360
cccttaacga tttcaaataa actcagaggg aactgcaggg agatcaaacc atttagggca 420
aattggacat gaataaaact ctagtgggaa aaagttcaaa ggtgattgaa taaataattt 480
aactttgccc tgggtattaa gtccagggct cccagattgt ggagcagagc cttggagagt 540
acaggatgaa ggagatagat gcnccttttga cttgccggga atgaaattgg attaatgnaa 600

```
ggatggtaaa taattcca                                               618
```

```
<210> 63
<211> 1138
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (1123)
<223> n equals a,t,g, or c
```

```
<400> 63
tctatanatc atganaggaa anggtancng acagtacggt cggattcccg ggtcgaccca 60
cgctccgatg acttcacccc tctggagatc ctctggacct tctccatcta cctggagtca 120
gtggccatct tgccgcagct gttcatggtg agcaagaccg gcgaggcgga gaccatcacc 180
agccactact tgtttgcgct aggcgtttac cgcacgctct atctcttcaa ctggatctgg 240
cgctaccatt tcgagggctt cttcgacctc atcgccattg tggcaggcct ggtccagaca 300
gtcctctact gcgatttctt ctacctctat atcaccaaag tcctaaaggg gaagaagttg 360
agtttgccgg catagccccg gtcctctcca tctctctcct cggcagcagc gggaggcaga 420
ggaaggcggc agaagatgaa gagctttccc atccaggggt gactttttta agaacccacc 480
tcttgtgctc cccatcccgc ctcctgccgg gtttcagggg gacagtggag gatccaggtc 540
ttggggagct caggacttgg gctgtttgta gttttttgcc ttttagacaa gaaaaaaaaa 600
tctttccact ctttagtttt tgattctgat gactcgtttt tcttctactc tgtggcccca 660
attttttataa agtgtttttg agtgtcctat gggccggggc agggtccaag atcttttccc 720
ttccccaggc ccctcggctc cctcccagat cccaccccca gccccactgg ttgccaaaca 780
```

48

```
ctaaatctgc cgacacccat ctgccccacc tcctgccatg gccatgaacc gcgaccccca 840
ctaaatttct agattgggga tagggagaaa gggaggccca ggaaggtctc ccctgatttt 900
ttttcatagt aatttttttc cccagagttt gaatttttg gtcttctcct ggttttttgg 960
caaattaggg gggcccgggg ctcaagtgcg ggaaggggc tggcccgagg atcccatggc 1020
tctcacacca tgttttgta cagaactgat ggttgaatct ttgttctctt gaaataaaca 1080
gaagaaaatg aaaccttaaa aaaaaaaaaa aaaaaaaaaa acncgggggg gggcccgg   1138
```

```
<210> 64
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c


<400> 64
tgctcatcca gaggagctca ccacagtcac tgcgacagac tgccacactc accctggcct 60
ggcctcagag aagttgagct actggcctca gttcacacag agcagatgga ggaagagctg 120
gcactaggac ccaggggggca gggggggagcc tccctggctg gaagggatgg caggagcgct 180
ggtgcaggta gctatggagc tctggccaac tctgcctggg gaggtcccag gaaggtggcg 240
tcagcatctg cagccgcgtc gacgttgtcg gagcctccgc ggaggaccca ggagagccgg 300
actaggacca gggccctggg cctccccaca ctcccatgg agaagctggc ggcctctaac 360
agagncccaa ngggcttggn cggtcctggg ncgtgaaaat gttcaagtgc ccgattga    418
```

```
<210> 65
<211> 2836
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2834)
<223> n equals a,t,g, or c
```

<220>
<221> misc feature
<222> (2836)
<223> n equals a,t,g, or c

<400> 65

```
aagaaaccgc ccattacaca ccccagtaca ccagcagagg aaacttataa cctcgggagg 60
caggtccttc ccctcagtgc ggtcacatac ttccagaaga gcggaccagg gctgctgcca 120
gcacctgcca ctcagagcgc ctctgtcgct gggacccttc agaactctct ttgctcacaa 180
gttaccaaaa aaaaaagagc caacatgttg gtattgctgg ctggtatctt tgtggtccac 240
atcgctactg ttattatgct atttgttagc accattgcca atgtctggtt ggtttccaat 300
acggtagatg catcagtagg tctttggaaa aactgtacca acattagctg cagtgacagc 360
ctgtcatatg ccagtgaaga tgccctcaag acagtgcagg ccttcatgat tctctctatc 420
atcttctgtg tcattgccct cctggtcttc gtgttccagc tcttcaccat ggagaaggga 480
aaccggttct tcctctcagg ggscaccaca ctggtgtgct gsctgtgcat tcttgtgggg 540
tgtccatcta cactagtcat tatgcgaatc gtgatggaac gcatatgcac cacggctatt 600
cctacatcct gggctggatc tgcttctgct tcagcttcat catcggcgtt ctctatctgg 660
tcctgagaaa gaaataaggc cggacgagtt catgggggatc tgggggggtgg ggaggaggaa 720
gccgttgaat ctgggaggga agtggaggtt gctgtacagg aaaaaccgag ataggggagg 780
ggggaggggg aagcaaaggg gggaggtcaa atcccaaacc attactgagg ggattctcta 840
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ctgtctttgt gctgaatacg ctaagcctgg aagccatcct gcccttctga cccaaagcaa 1140
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tctttggaac agatatttag ctctgtggaa ttcagtgaca aaatgggagg aggaaagaga 1260
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ggggcagtct tgcaacagtg ccatgttagg gttatgtttt taggattccc ctcaatgcag 1560
tcagtgtttc ttttaagtat acaacaggag agagatggac atggctcatt gtagcacaat 1620
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atgattatag aaggctgtct tagtgcaaaa aacatactta catttcagac atatccaaag 2520
ggaatactca catttttgtta agaagttgaa ctatgactgg agtaaaccat gtattcccctt 2580
atctttttact ttttttctgt gacatttatg tctcatgtaa tttgcattac tctggtggat 2640
tgttctagta ctgtattggg cttcttcgtt aatagattat ttcatatact ataattgtaa 2700
```

50

```
atattttgat acaaatgttt ataactctag ggatataaaa acagattctg attcccttca 2760
ttgtgtgaat gttttttttct aaaaaaaatg tggagaaata tggataatta tgacatttat 2820
ccctcattaa agcngn                                                      2836
```

```
<210> 66
<211> 2305
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1973)
<223> n equals a,t,g, or c

<400> 66
aaacgttccc ggtccttcct gaaccaagct gtggaccctc gtaagcaacc cggacaccga 60
cgcgctcatc tgctggagcc cgagcgsgaa cagcttccac gtgttcgacc agggccagtt 120
tgccaaggag gtgctgccca agtacttcaa gcacaacaac atggccagct tcgtgcggca 180
gytcaacatg tatggcttcc ggaaagtggt ccacatcgag cagggcgkcc tggtcaagcc 240
agagagagac gacacggagt tccagcaccc atgcttcctg cgtggccagg agcagctcct 300
tgagaacatc aagaggaaag tgaccagtgt gtccaccctg aagagtgaag acataaagat 360
ccgccaggac agcgtcacca agctgctgac ggacgtgcag ctgatgaagg ggaagcagga 420
gtgcatggac tccaagctcc tggccatgaa gcatgagaat gaggctctgt ggcgggaggt 480
ggccagcctt cggcagaagc atgcccagca acagaaagtc gtcaacaagc tcattcagtt 540
cctgatctca ctggtgcagt caaaccggat cctggggggtg aagagaaaga tccccctgat 600
gctgaacgac agtggctcag cacattccat gcccaagtat agccggcagt tctccctgga 660
gcacgtccac ggctcgggcc cctactcggc cccctcccca gcctacagca gctccagcct 720
ctacgcccct gatgctgtgg ccagctctgg acccatcatc tccgacatca ccgagctggc 780
tcctgccagc cccatggcct cccccggcgg gagcatagac gagaggcccc tatccagcag 840
cccccctggtg cgtgtcaagg aggagccccc cagcccgcct yagagcccccc gggtagagga 900
ggcgagtccc gggsgcccat cttccgtgga caccctcttg tcccgaccg ccctcattga 960
ctccatcctg cgggagagtg aacctgcccc cgsctccgtc acagccctca cggacgccag 1020
gggccacacg gacaccgagg gccggcctcc ctcccccccg cccacctcca ccccctgaaaa 1080
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gccctgctgg acctgttcag cccctcggtg accgtgcccg acatgagcct gcctgacctt 1260
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gaggcagaga acagcagccc ggattcaggg aagcagctgg tgcactacac agcgcagcgc 1380
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cctgctgaca ggctcggagc ctcccaaagc caaggacccc actgtctcct agaggccccg 1560
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gtggttggtg ctgcaatgag gaggggccca gggcacagaa gggccgggct gcagtggcct 2040
cctgggggaa gacggatgtt gcagctagct ccgtgcctgc ccgactcccc aggaccagca 2100
tgtgcttgca gttctttatt gagggaccag gggtgggcgc ctcaccttgg ccctggggggt 2160
```

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ctctggttgt cacaggacca ccaggaaccc ccttcccaag gtgttcgcac tcggacaggt 2220
gatgcggggc gggcacactg tctttctgcc agagccagca ccctgtgtag gcacggggaa 2280
cgggagcctg tcccgtagct ttagg                                      2305


<210> 67
<211> 1907
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1221)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1655)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1896)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1904)
<223> n equals a,t,g, or c


<400> 67
gacgcccgcc gcctcactgt ttctagcctt cagtggccaa cgttggtagt cattgtgacc 60
tcagcctgaa aatccctgaa attagcatcc aggatatgac agcccaggtg accagcccat 120
cgggcaagac ccatgaggcc gagatcgtgg aaggggagaa ccacacctac tgcatccgct 180
ttgttcccgc tgagatgggc acacacacag tcagcgtgaa gtacaagggc cagcacgtgc 240
ctgggagccc cttccagttc accgtggggc ccctagggga aggggagcc cacaaggtcc 300
gagctggggg ccctggcctg gagagagctg aagctggagt gccagccgaa ttcagtatct 360
ggacccggga agctggtgct ggaggcctgg ccattgctgt cgagggcccc agcaaggctg 420
agatctcttt tgaggaccgc aaggacggct cctgtggtgt ggcttatgtg gtccaggagc 480
caggtgacta cgaagtctca gtcaagttca acgaggaaca cattcccgac agccccttcg 540
tggtgcctgt ggcttctccg tctggcgacg cccgccgcct cactgtttct agccttcagg 600
agtcagggct aaaggtcaac cagccagcct cttttgcagt cagcctgaac ggggccaagg 660
gggcgatcga tgccaaggtg cacagcccct caggagccct ggaggagtgc tatgtcacag 720
aaattgacca agataagtat gctgtgcgct tcatccctcg ggagaatggc gtttacctga 780
ttgacgtcaa gttcaacggc acccacatcc ctggaagccc cttcaagatc cgagttgggg 840
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gtgtcacagg gaacccagct gagttcgtcg tgaacacgag caatgcggga gctggtgccc 960
tgtcggtgac cattgacggc ccctccaagg tgaagatgga ttgccaggag tgccctgagg 1020
gctaccgcgt cacctatacc cccatggcac ctggcagcta cctcatctcc atcaagtacg 1080
gcggcccta ccacattggg ggcagcccct caaggccaa agtcacaggc ccccgtctcg 1140
tcagcaacca cagcctccac gagacatcat cagtgtttgt agactctctg accaaggcca 1200
cctgtgcccc ccagcatggg ncccecgggtc ctgggcctgc tgacgccagc aaggtggtgg 1260
```

52

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ccaagggctg gggctgagca aggcctacgt aggccagaag agcagcttca cagtagactg 1320
cagcaaagca ggcaacaaca tgctgctggt gggggttcat ggcccaagga ccccctgcga 1380
ggagatcctg gtgaagcacg tgggcagccg gctctacagc gtgtcctacc tgctcaagga 1440
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ccgcgttgtg gtgccctgag tctggggccc gtgccagccg gcagccccca agcctgcccc 1560
gctacccaag cagccccgcc ctcttcccct caaccccggc ccaggccgcc ctggccgccc 1620
gcctgtcact gcagccgccc ctgccctgtg ccgtnctgcg ctcacctgcc tccccagcca 1680
gccgctgacc tctcggcttt cacttgggca gagggagcca tttggtggcg ctgcttgtct 1740
tctttggttc tgggaggggt gagggatggg ggtcctgtac acaaccaccc actagttctc 1800
ttctccagcc aagaggaata aagtttgct tccattcwma aaaaaaaaaa aaaaaaaaaa 1860
tyggggggg kccgktaacc caattggcct ttaagngggt ggtntta                1907
```

<210> 68
<211> 815
<212> DNA
<213> Homo sapiens

<400> 68
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gggtcgaccc acgcgtccgt ttttttaag tgtgaatttt ttattgagat aaacaacagc 60
ataaagaata caagtagcca aatggttttg aaaaaccaaa ttaggtcaaa gttctaaatt 120
aaaaatagca gttgtgtttc aatttacctt attctagcaa ttwaagtwgg taacatacaa 180
atagttatwc tgatacaaga tattaaagac atactcagtt ttaatcaact acctctcaag 240
aaacagtagg gcctctgtaa aattggagac tgataggttg atcagaaact caccctaaat 300
ctgaacgggt gccgctataa tttgtgacat ctggcaagat ttccctttat gtatatattt 360
taacaatccg cttggacacg aacaaagcca cacttctaac tgcttctggc gaactgattt 420
tatttttaat ttttttcaat aaagatattc ttagatactg aaagaaatag ttaatgagtt 480
tgcatttgtg cttgagaaaa tttggctcaa gtccatttgg ctgtagtgtc aacgatgttc 540
ccagtagtgt ttagatttgg tgtcttcaaa ggtagttgat taaaaccaag tgtgtcttta 600
atatcttgta tcagaataac tttgtatgtt accaacttaa attgctagaa taaggtaaat 660
tgatacacaa ctgctatttt taatttagaa ctttgaccta atttgggttt tcaaaaccat 720
tttggctact tgtattcttt atgctgttgt ttatttcaat aaaaaattca cacctaaatg 780
tatacttact aaaaaaaaaa aaaaaaaaaa actcg                           815
```

<210> 69
<211> 1150
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (23)

53

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1150)
<223> n equals a,t,g, or c

<400> 69
ctcgtgcaat tcgngcagan tgntncctgg cctccttttg cttgcccgtg gctgttcctc 60
ctgggtcctc ttgccctggg ctggatgcct tcttcggctc cccctctgca tgtgataact 120
tggggtggcc cttggagctg tgccaaagct acacctcggg gtcctagtct caactggcct 180
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gtccatcatc ccagtggtca tggctggcat catcgccatc tacggcctgg tggtggcagt 360
cctcatcgcc aactccctga atgacgacat cagcctctac aagagcttcc tccagctggg 420
cgccggcctg agcgtgggcc tgagcggcct ggcagccggc tttgccatcg gcatcgtggg 480
ggacgctggc gtgcggggca ccgcccagca gccccgacta ttcgtgggca tgatcctgat 540
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aaagtagacc ctctccgagc ccaccagcca cagaatatta tgtaaagacc accctcctc 660
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cgtgccgtgg acatctgggc ccactcatcg cccctccagg ccccggcgc cccaccccct 840
agagtgctct gtgtatgcgg atgatttaga attgtcattt ctctttactg gatgtttatt 900
tataaagatc tggcctgttc ctgcgtctgc ggagcggccc ttgtctccca gctatctata 960
accttagcta gagtgtcgcc ttgtgggttc ctgttgctga gacttcctgg atggagccgc 1020
cctcaccgcc gggcccgtgg ccctgcgcgg agctgtgtcc aataaagttc ttggatgtga 1080
aaaaaaaaaa aaaaaaaaaa aaaaaaraaa araaaaaaaa aaaraaaraa aaraaaawaa 1140
gaaaaaaaan   1150

<210> 70
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c

<220>
<221> misc feature

54

```
<222> (339)
<223> n equals a,t,g, or c

<400> 70
cgcaggctct gcggccgggt tccttccgcg ggacggggag aaagagagag cgcgaaagag 60
agaggatgtc tctctcagat tggcacctgg cggtgaagct ggctgaccag ccacttgccc 120
caaagtctat tctccagttg ccagagtcag agctgggtga atactctctg gggggctaca 180
gtatttcatt tctgaaacag ctcattgctg gcaaactcca ggagtcggtt ccagaccctg 240
agctgattga tctgatatac tgtggccgga agcttaaaga tgaccanacc ttgacttcta 300
cggtattcaa cctggctcca catccatgtt ctncggaant cctg              344

<210> 71
<211> 448
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c

<400> 71
tcgacccacg catccgaaga tgttcttgct gccccttccg gctgccgggc gagtcgtcct 60
ccgacgtctg ggcgtgaaca gttctgggca cggggtctcg ccgccgcaga catgacgaag 120
ggtcttgttt taggaatcta tagtaaagac aaagaagatg atgtgccaca gtttacgagt 180
gcaggagaga atttcgataa attggtgtct ggaaagttga gagaaatttt gaacatatct 240
ggacctcctc tgaaagcagg caaaacccga accttttatg tctgcatga ggacttcccc 300
agcgtggtgg tggtcggcct cggcagaaag gcagctggag tcgatgacca ggaaaactgg 360
cmtgaaggca agaaaaacat cagagtcgcc atgcaacggg gtgcaggcag gttccaagac 420
ctggnaatct cttctgtgga aggtggat                                448

<210> 72
<211> 2825
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2093)
<223> n equals a,t,g, or c

<400> 72
gagaaggagg tcgcgcggcc tcatcccggg ccgcgcccca ggccgccgcc ggccccgcgc 60
tcatgaggtt gctcgcgcgc ccccgccgat cgccatggat cggatgaaga agatcaaacg 120
gcagctgtca atgacactcc gaggtggccg aggcatagac aagaccaatg gtgcccctga 180
gcagataggc ctggatgaga gtggtggtgg tggcggcagt gaccctggag aggcccccac 240
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acgtgctgct cctggggaac ttcgttctgc acggggccca ctcagctctg caccagagat 300
tgtgcacgag gacttgaaga tggggtctga tggggagagt gaccaggctt cagccacgtc 360
ctcggatgag gtgcagtctc cagtgagagt gcgtatgcgc aaccatcccc cacgcaagat 420
ctccactgag gacatcaaca agcgcctatc actaccagct gacatccggc tgcctgaggg 480
ctacctggag aagctgaccc tcaatagccc catctttgac aagcccctca gccgccgcct 540
ccgtcgtgtc agcctatctg agattggctt tgggaaactg gagacctaca ttaagctgga 600
caaactgggc gagggtacct atgccaccgt ctacaaaggc aaaagcaagc tcacagacaa 660
ccttgtggca ctcaaggaga tcagactgga acatgaagag ggggcaccct gcaccgccat 720
ccgggaagtg tccctgctca aggacctcaa acacgccaac.atcgttacgc tacatgacat 780
tatccacacg gagaagtccc tcacccttgt ctttgagtac ctggacaagg acctgaagca 840
gtacctggat gactgtggga acatcatcaa catgcacaac gtgaaactgt tcctgttcca 900
gctgctccgt ggcctggcct actgccaccg gmagaaggtg ctacaccgag acctcaagcc 960
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ccctgacatc ctgcttgggt ccacggacta ctccactcag attgacatgt ggggtgtggg 1140
ctgcatcttc tatgagatgg ccacaggccg tcccctcttt ccgggctcca cggtggagga 1200
acagctacac ttcatcttcc gtatcttagg aaccccaact gaggagacgt ggccaggcat 1260
cctgtccaac gaggagttca agacatacaa ctaccccaag taccgagccg aggccctttt 1320
gagccacgca ccccgacttg atagcgacgg ggccgacctc ctcaccaagc tgttgcagtt 1380
tgagggtcga aatcggatct ccgcagagga tgccatgaaa catccattct tcctcagtct 1440
gggggagcgg atccacaaac ttcctgacac tacttccata tttgcactaa aggagattca 1500
gctacaaaag gaggccagcc ttcggtcttc gtcgatgcct gactcaggca ggccagcttt 1560
ccgcgtggtg gacaccgagt tctaagccac agaccgaggc cccagcaggc agcggctgga 1620
gggatgccac acccctcaca gggcagcccc caactacatc ttccctgctt actctctgcc 1680
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tcatattgtg tgggcctttt tttgtttgtt tcattcattg tttttttttt ttnaattatt 2100
ttaaatgaga tttttgtttt ttttaaatgc aatatctctg tatacagact ggctgggccc 2160
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cagagacagg gacacagccc ctatttggaa ccctgatcat caccagaccc tgggattggc 2280
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gggggatctg gggactacca gagactctgg gaaatggaca aggtgggggg ccccactctt 2400
tctctcctgc agtcccgtag ctggggcctc cttccttctc agggtctccc cagcccagtc 2460
cccttgctcc catcccactc ggtgctgttg ggtaggggcc ctgccaggaa ctgaccagct 2520
cagcgaggag ccataatgtg catatgtgca caagcagggt tgggggaggg gggtgtgagg 2580
ggttgtgccc aggtgttgcc ccctatctcc tggggagggt gaggcagggc agggacagtc 2640
tccagggtca gtccctggat gggtggttac ctccccttcc tccaccctaa gccctggggc 2700
cctgaaatgg ggtgggaggg cagggtggg agccctccta gtgggtttgg ggggttgggt 2760
tcctgaatgc accataatcg ctgtatgaaa tattaaaaag tctaaagtga aaaaaaaaa 2820
aaaaa                                                         2825
```

<210> 73
<211> 510
<212> DNA
<213> Homo sapiens

<400> 73

56

```
atgtacgaga gcgcatccaa agaacctagt agagaaaggt attctaacca ctgagaagca  60
gaatttccts ctatttgaca tgactactca tccagtgacc aatacaacag agaaacagcg 120
actagtgaaa aaacttcaag atagtgtact agagcggtgg gtaaatgacc ctcagcgtat 180
ggacaagcga acactagcac tcctggtgct agcccactcc tctgatgtgc tagagaatgt 240
cttctcctct ctgacagatg acaagtatga tgtggcaatg aatcgagcca aggacttagt 300
agaactggac cctgaagtgg aagggacaaa gccyagtgcc acagaratga tctgggctgt 360
gctggcagcc tttyaataaa tcytaaagcc rgyrggtggg tttctycttt tcccctgctg 420
gctggtgact gttcagagac mccwcactga gttttgtgtg atgasatgtt ttccatcatt 480
ttttccttyc ttgaatcaga cttgtgaatt                                  510
```

<210> 74
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c

<400> 74
```
gggtcgaccc acgcgtccgc tccacttaaa attcaacttc tgcttggttc atctgattct  60
ttcaaggtct taaatgttaa atgaaggggt aaaataggaa ggtatttaag taattagcag 120
gcctcctggg tcttgataac ttcagtgctt ctgggagctg cccggttggc caccagtctc 180
tgtggaatcc aggggcctct tcccaatatg gatttgacca gcacttcaat tagtgagttt 240
ccatkagcat cttagcatta ctctttaata cagacgcctt attttccagg gtttatgaaa 300
gtttaagtga caaccatgga ttgcaggaac agactgttga gaagctgttt ttccagtgga 360
aaagttgggt ccaggagatg angggagnct tgaaatagat cctgggatgg aaacataaag 420
tggncagcca gattcccatc atgggctncc ccataaaa                          458
```

<210> 75
<211> 377
<212> DNA
<213> Homo sapiens

<400> 75

57

```
gtcctggaaa cacatcaagc tcagctcctg tgtccagctc gcttctctgc tggactcctt 60
gatttttttt ttaatcattg tttgattttg agcagtaacc aggctttttt ttccagatgt 120
tagtccacac ctattcatcc atggaccggc acgatggtgt cccgagccac agctcgcggc 180
tctcccagct gggctcggtg tcccaaggac cctactcgag cgccccgccg ctgtcccaca 240
ccccgtcgtc ggacttccag ccgcccctact tcccamcccc ctaccagccg ctcccctamc 300
amcagagcca ggacccctac tcccacgtca amgamcccta tccctgaacc cactgcacca 360
gccccagcaa catccct                                              377
```

<210> 76
<211> 2070
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2068)
<223> n equals a,t,g, or c

<400> 76
```
tcatgaatgg gaatcctggn cccaagaact ccgcttgcng ccagagggac ctgcagctga 60
ggacctatag cgttgtgccc atgacctnca gtgtatccca gggcaccgcc gtgtgtaata 120
taaagattgg ctgacaaaaa tgtcaggaaa acatgatgtt ggagcttaca tgctaatgta 180
taagggcgct aatcgtactg aaacagtcac gtctttttaga aaacgagaaa gtaaagtgcc 240
tgctgatctc ttaaagcggg ccttcgtgag gatgagtaca agccctgagg ctttcctggc 300
gctccgctcc cacttcgcca gctctcacgc tctgatatgc atcagccact ggatcctcgg 360
gattggagac agacatctga acaactttat ggtggccatg gagactggcg gcgtgatcgg 420
gatcgacttt gggcatgcgt ttggatccgc tacacagttt ctgccagtcc ctgagttgat 480
gccttttcgg ctaactcgcc agttatcaa tctgatgtta ccaatgaaag aaacgggcct 540
tatgtacagc atcatggtac acgcactccg ggccttccgc tcagaccctg gcctgctcac 600
caacaccatg gatgtgtttg tcaaggagcc ctcctttgat tggaaaaatt ttgaacagaa 660
aatgctgaaa aaaggagggt catggattca agaaataaat gttgctgaaa aaaattggta 720
cccccgacag aaaatatgtt acgctaagag aaagttagca ggtgccaatc cagcagtcat 780
tacttgtgat gagctactcc tgggtcatga gaaggcccct gccttcagag actatgtggc 840
tgtggcacga ggaagcaaag atcacaacat tcgtgcccaa gaaccagaga gtgggctttc 900
agaagagact caagtgaagt gcctgatgga ccaggcaaca gaccccaaca tccttggcag 960
aacctgggaa ggatgggagc cctggatgtg aggtctgtgg gagtctgcag atagaaagca 1020
```

```
ttacattgtt taaagaatct actatacttt ggttggcagc attccatgag ctgattttcc 1080
tgaaacacta aagagaaatg tcttttgtgc tacagtttcg tagcatgagt ttaaatcaag 1140
attatgatga gtaaatgtgt atgggttaaa tcaaagataa ggttatagta acatcaaaga 1200
ttaggtgagg tttatagaaa gatagatatc caggcttacc aaagtattaa gtcaagaata 1260
taatatgtga tcagctttca aagcatttac aagtgctgca agttagtgaa acagctgtct 1320
ccgtaaatgg aggaaatgtg gggaagcctt ggaatgccct tctggttctg gcacattgga 1380
aagcacactc agaaggcttc atcaccaaga ttttgggaga gtaaagctaa gtatagttga 1440
tgtaacattg tagaagcagc ataggaacaa taagaacaat aggtaaagct ataattatgg 1500
cttatattta gaaatgactg catttgatat tttaggatat ttttctaggt tttttccttt 1560
cattttattc tcttctagtt ttgacatttt atgatagatt tgctctctag aaggaaacgt 1620
ctttatttag gagggcaaaa attttggtca tagcattcac ttttgctatt ccaatctaca 1680
actggaagat acataaaagt gctttgcatt gaatttggga taacttcaaa aatcccatgg 1740
ttgttgttag ggatagtact aagcatttca gttccaggag aataaaagaa attcctattt 1800
gaaatgaatt cctcatttgg aggaaaaaaa gcatgcattc tagcacaaca agatgaaatt 1860
atggaataca aaagtggctc cttcccatgt gcagtccctg tcccccccg ccagtcctcc 1920
acacccaaac tgtttctgat tggcttttag cttttttgttg tttttttttt tccttctaac 1980
acttgtattt ggaggctctt ctgtgatttt gagaagtata ctcttgagtg tttaataaag 2040
tttttttcca aaaaaaaaaa aaaaaantt                                    2070
```

```
<210> 77
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (619)
<223> n equals a,t,g, or c

<400> 77
ctcgccctcc tgactcttcc tgcaggtggc tcaggaagga ttcagcctgg ccacttggct 60
aggactctgc cagcacccat ctgagactga cctcttccgg gcctttggac actatgacct 120
tgatgctgcc cttcaggcag gaaacagggc tggtgccttt tttcacctgc atggccagct 180
tccttccctg gcagtggaga gggcagccaa caggttctaa tgtcagagcc atcctttacc 240
aggtgggcct gcttgtccct gtcttgcctg ccacatcact ctacttttg gaaggccatg 300
gctgattaaa gaagttcttg tagtttccca agcaaagtgg aatctagaaa cagtgaaaaa 360
agttcagata actttgaatt gcattcaaga agtacacttc tttcccattg tccgtggctc 420
ttggagtctc cgtgatgcca ggctagagtc tgattatata ataattcaaa atggtaactc 480
ccaaggtaat gctttcttcc atttcatcag gttctttat ccccactgca cccctcccc 540
ttctcccttg cctatctgga tggcttctca gaagctcggc cctagtcctc cctgccttgg 600
cgggggccag agcccactna ctgctgaggc agcactgctc tcgtcagctg tgttgccttt 660
amccaagtgt cttcagaggg ttatgagtta gagtagctgg cctggggaga gggtgcctcc 720
ctgggtttga tctttagggt ctgactttct gcagagaaga tgttttacag atgtgtcaaa 780
gctgatgtaa tgtggttggg ggaggaaatc cagacccaaa gtgtttgtca gctgggtgta 840
caactgccta tgtgatcctc tgtcttaaaa tgatttctgt ctgtgctgcg aaacaaagac 900
aaggtgaggt gttttctttt tttgtaataa tataaagctg tgtgtttctg attggatgat 960
tcactatgtg cattgttccy cctaagtgct tttagta                           997
```

```
<210> 78
<211> 1333
<212> DNA
```

59

<213> Homo sapiens

<220>
<221> misc feature
<222> (1254)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1297)
<223> n equals a,t,g, or c

<400> 78

```
gagaggagct gctgcgcgcc caggaagcgc cggggcaggc cgagccgccg gccgccgccg 60
aggtgcaggg ggctggcaac gaaaatgagc ctcgcgaggc cgacaagagc cacccggagc 120
agcgcragct tcggcctcgg ctctgtacca tgaagaaggg ccccagtggc tatggcttca 180
acctgcacag cgacaagtcc aagccaggcc agttcatccg gtcagtggac ccagactccc 240
cggctgaggc ttcagggctc cgggcccagg atcgcattgt ggaggtgaac ggggtctgca 300
tggaggggaa gcagcatggg gacgtggtgt ccgccatcag ggctggcggg gacgagacca 360
agctgctggt ggtggacagg gaaactgacg agttcttcaa gaaatgcaga gtgatcccat 420
ctcaggagca cctgaatggt cccctgcctg tgcccttcac caatggggag atacagaagg 480
agaacagtcg tgaagccctg gcagaggcag ccttggagag ccccaggcca gccctggtga 540
gatccgcctc cagtgacacc agcgaggagc tgaattccca agacagcccc ccaaaacagg 600
actccacagc gccctcgtct acctcctcct ccgaccccat cctagacttc aacatctccc 660
tggccatggc caaagagagg gcccaccaga aacgcagcag caaacgggcc ccgcagatgg 720
actggagcaa gaaaaacgaa ctcttcagca acctctgagc gccctgctgc cacccagtga 780
ctggcagggc cgagccagca ttccacccca ccttttttcct tctccccaat tactcccctg 840
aatcaatgta caaatcagca cccacatccc ctttcttgac aaatgatttt tctagagaac 900
tatgttcttc cctgacttta gggaaggtga atgtgttccc gtcctcccgc agtcagaaag 960
gagactctgc ctccctcctc ctcactgagt gcctcatcct accgggtgtc cctttgccac 1020
cctgcctggg acatcgctgg aacctgcacc atgccaggat catgggacca ggcgagaggg 1080
caccctccct tcctccccca tgtgataaat gggtccaggg ctgatcaaag aactytgact 1140
gcagaactgc cgytctyagt ggacagggca tytgttatga cagacctktg gcagacacgt 1200
cttgtttttca ttgatttttg ttaagagtgc agtattgcag agtctagagg aatntatgtt 1260
tccttgatta acatgatttc ctggttgtta catccanggc aggcagtggc tcagctttaa 1320
atttggtttc cta                                                   1333
```

<210> 79
<211> 560
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (542)
<223> n equals a,t,g, or c

<400> 79

```
caatggggct gaggctgtgt ccactgaggc taagatgact gcctttcctg attggccttg 60
gcttttccat acattgtgtg acccttgccc tatgaccctt tggctgacct taccggaagc 120
catgacgaca gcagcctttt gccattagac gcagggtgat ggtgaggatt ccaagggtta 180
```

```
gacaaaactg gttaatctga actaggtgac tgttaccttg cgtgttttgt ggccaaacca 240
ccaccaaaaa cctcacactg tgatgtaagt acttagtgta aaactagtaa acatttttgt 300
aaaatgtaga aatgcatgta atcagttaag ttttatattt tacaatgttc tgtaaaataa 360
aacttagcga ggtaaatcga ataaaggagc agtcactctc taacagattg taggagaggt 420
ttagttggat ttagtctatt tgacttgccc ttaatttaat tttatggcaa atcacaaatg 480
tgtcgaaggt ttagcaatat aatagcaaag tcctactcca gtaaataaaa gttggtatgt 540
tngtacttaa cttttcaaaag                                             560
```

```
<210> 80
<211> 3203
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1116)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1443)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1942)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3188)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3201)
<223> n equals a,t,g, or c

<400> 80
cggtacgcgt gggtcgcggg cttcgggggt ctgcgctcgc ggctgcctgg actcagcagg 60
cccctggacc atgtcccgcg ccctgcggcc accgctcccg cctctctgct ttttcctttt 120
gttgctggcg gctgccggtg ctcgggccgg gggatacgag acatgcccca cagtgcagcc 180
gaacatgctg aacgtgcacc tgctgcctca cacacatgat gacgtgggct ggctcaaaac 240
cgtggaccag tactttttatg gaatcaagaa tgacatccag cacgccggtg tgcagtacat 300
cctggactcg gtcatctctg ccttgctggc agatcccacc cgtcgcttca tttacgtgga 360
gattgccttc ttctcccgtt ggtggcacca gcagacaaat gccacacagg aagtcgtgcg 420
agaccttgtg cgccaggggc gcctggagtt cgccaatggt ggctgggtga tgaacgatga 480
ggcagccacc cactacggtg ccatcgtgga ccagatgaca cttgggctgc gctttctgga 540
ggacacattt ggcaatgatg ggcgaccccg tgtggcctgg cacattgacc ccttcggcca 600
ctctcgggag caggcctcgc tgtttgcgca ratgggcttc gacggcttct tctttgggcg 660
ccttgattat caagataagt gggtacggat gcagaagctg gagatggagc aggtgtggcg 720
```

```
ggccagcacc agcctgaagc ccccgaccgc ggacctcttc actggtgtgc ttcccaatgg 780
ttacaacccg ccaaggaatc tgtgctggga tgtgctgtgt gtcgatcagc cgctggtgga 840
ggaccctcgc agccccgagt acaacgccaa ggagctggtc gattacttcc taaatgtggc 900
cactgcccag ggccggtatt accgcaccaa ccacactgtg atgaccatgg gctcggactt 960
ccaatatgag aatgccaaca tgtggttcaa gaaccttgac aagctcatcc rgctggtaaa 1020
tgcgcaaggc aaaaggaagc agtgtccatg ttctctactc cacccccgct tgttacctct 1080
gggagctgaa caaggccaac ctcacctggt cagtgnaaca tgacgacttc ttcccttacg 1140
cggatggccc ccaccagttc tggaccggtt acttttccag tcggccggcc ctcaaacgct 1200
acgagcgcct cagctacaac ttcctgcagg tgtgcaacca gctggaggcg ctggtgggcc 1260
tggcggccaa cgtgggaccc tatggctccg gagacagtgc acccctcaat gaggcgatgg 1320
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acgcgcgcca stttgcggca ggctgggggc cttgcgaggt tcttctgagc aacgcctggc 1440
gcngctcaga ggcttcaaag atcacttcac cttttgccaa cagctaaaca tcagcatctg 1500
cccgctcagc cagacggcgg cgcgcttcca ggtcatcgtt tataatcccc tggggcggaa 1560
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tggcaggaca gtgcccagcg atgtggtaat atttcccagc tcagacagcc aggcgcaccc 1680
tccggagctg ctgttctcag cctcactgcc cgccctgggc ttcagcacct attcagtagc 1740
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gtccctgct ttaaccatcg aaaatgagca catccgggca acgtttgatc ctgacacagg 1860
gctgttgatg gagattatga acatgaatca gcaactcctg ctgcctgttc gccagacctt 1920
cttctggtac aacgccagta tnaggtgaca acgaaagtga ccaggcctca ggtgcctaca 1980
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ttcgcctgta cccaggacag cggcacctgg agctagagtg gtcggtgggg ccgatacctg 2160
tgggcgacac ctgggggaag gaggtcatca gccgttttga cacaccgctg gagacaaagg 2220
gacgcttcta cacagacagc aatggccggg agatcctgga gaggaggcgg gattatcgac 2280
ccacctggaa actgaaccag acggagcccg tggcaggaaa ctactatcca gtcaacaccc 2340
ggatttacat cacggatgga aacatgcagc tgactgtgct gactgaccgc tcccaggggg 2400
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cggggctcct ccgcgcacgc agttctcagg gctgcgcagg gacctgccgc cctcggtgca 2700
cctgctcacg ctggccagct ggggccccga aatggtgctg ctgcgcttgg agcaccagtt 2760
tgccgtagga gaggattccg gacgtaacct gagcgccccc gttaccttga acttgaggga 2820
cctgttctcc accttcacca tcacccgcct gcaggagacc acgctggtgg ccaaccagct 2880
ccgcgaggca gcctccaggc tcaagtggac aacaaacaca ggccccacac cccaccaaac 2940
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ggcctcagtt caatggaagg aggtggatgg ttaggtctgc tgggatgggc cctccaagcc 3060
caagcctcct gctccggggg cagaccagac tctgactctc ctcttgggct gctgccatta 3120
aaacgctact actaagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3180
aaatttanaa aaaaaaaaa naa                                         3203
```

```
<210> 81
<211> 1710
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1424)
```

<223> n equals a,t,g, or c

<400> 81
```
aagagccgaa cggataagag aagaggaggg cgcgkatggc gtcggggcgc cccgaggagc 60
tgtgggaggc cgtggtgggg gccgctgagc gcttccgggc ccggactggc acggagctgg 120
tgctgctgac cgcggccccg ccgcaccacc ccgcccgggc ccctgtgcct atgctgccca 180
tggtcgagga gccctggcgg aggcagcgcg ccgttgcctc cacgacatcg cactggccca 240
cagggctgcc actgctgctc ggcctcctgc gccccacca gcaccacagc cacccagtcc 300
cacacccagc ccaccccggc ctaccctggc cagagaggac aacgaggagg acgaggatga 360
gcccacagag acagagacct ccggggagca gctgggcatt agtgataatg gagggctctt 420
tgtgatggat gaggacgcca ccctccagga ccttcccccc ttctgtgagt cagaccccga 480
gagtacagat gatggcagcc tgagcgagga gacccccgcc ggccccccca cctgctcagt 540
gcccccagcc tcagccctac ccacacagca gtacgccaag tccctgcctg tgtctgtgcc 600
cgtytggggc ttcaaggaga agaggacaga ggcgcggtca tcagatgagg agaatgggcc 660
gccctcttcg cccgacctgg accgcatcgc ggcgagcatg cgcgcgctgg tgctgcgaga 720
ggccgaggac acccaggtct tcggggacct gccacggccg cggcttaaca ccagcgactt 780
ccagaagctg aagcggaaat attgaagtcc agggagggag cgccccgggc cgcgtccgcc 840
ccgtcccaca ctacgccccc gccccactcc cggggcctgc taatctgagg ccgatccggg 900
accggcctcc ttgcgtctcc cattcccaag attgtcccgc ctctgccaat ccccgccgtc 960
cttccagccc acgacctgcc gcgccgagga gcggcwtctg tcccgtttcc cgattgggtc 1020
tgtcgtctct ctccgcctag cgacagattc cttctattaa gggattggct cgctgagttc 1080
taagctctaa atgggtcaac tcctttgttt tccgcctagc gacaagggat ttgctcgcac 1140
ggcattggct ccatccccta gtcgctggac agctcttttt ttgattggct caaatcctgt 1200
aaagggcttg accagtctct acatagtcac cgtccgcttt tcctgagttc tccctcccaa 1260
ttggctccag cttcctgggg gcgtggccaa gccctcctct tcccagaatt ggcccggggc 1320
cttcaattta cgttctttac actacgggga ctgggtcgt ctttgcccac gtcccgacaa 1380
cttgttccct gaccccctca gggatggccc caaactgtcc ctgnctctgg cacccccttt 1440
cattggttcc atccatcccc acaacagcct gccaatcgaa gcccgtccct gcatccagga 1500
tggtaccagc tcccgcccct cgccccccac ctccacaggt gccttaaagg gccctcgtca 1560
cccaaggtgg gggcagggc cctcactctc cggccctggt gtggggggaga gagtgagggg 1620
ttgggggatc ggcagttggg aggggcgctc tgagattaaa gagtttacc tctgagataa 1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                  1710
```

<210> 82
<211> 1379
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1365)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1378)

63

```
<223> n equals a,t,g, or c

<400> 82
aattcggcag agctgagccc cgggctgtgc agtccgacgc cgactgaggc acgagcgggt 60
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gtggacgaca cgtgggcaca ggcagaagtg ggccctgtga ccagctgcac tggtttcgtg 180
gaaggaagct ccaggactgg cgggatgggc tcagcctgta tcaaagtcac caaatacttt 240
ctcttcctct tcaacttgat cttctttatc ctgggcgcan tgatcctggg cttcggggtg 300
tggatcctgg ccgacaagag cagtttcatc tctgtcctgc aaacctcctc cagctcgctt 360
aggatggggg cctatgtctt catcggcgtg ggggcagtca ctatgctcat gggcttcctg 420
ggctgcatcg gcgccgtcaa cgargtccgc tgcctgctgg ggctgtamtt tgctttcctg 480
ctcctgatcc tcattgccca rgtgacggcc ggggccctct tctacttcaa catgggcaag 540
gtaagcccct ctctccctcc ctcttcactg ggctggacca accatggggg tgattgactg 600
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ggacggcctc ctggacacta ttccttgtga atcaaatggg ggagcgttag aagagaaggc 720
ggcaggtgtr ggcagtcccc gctgggcctg gwtcttagcc tgacccccct gctttctagc 780
tgtgtggcct tgggcaagct gcttgcctct atgtgcctgt tccaccatct gtgaaaatgg 840
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rtactttagc aactattaaa tccatgccac tcacccacaa atgaggttta gaaggagacc 1020
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tcagacttac agcggcttaa agttgaagga catctgtggt tgacttgacc ggaagtctgg 1140
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gcattatgac acttacctcg tggttccaag atggctgcca cagcaccagg cacgatgtct 1260
gtgccgctgt ggcctgaaga tggggaagtg ggcagtgcca gacatggcca tcccttttat 1320
ccagaaaagg cgcagtggct catgactgta atccccaata cttanggaag cagaagtng 1379

<210> 83
<211> 678
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (626)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (648)
<223> n equals a,t,g, or c

<400> 83
gcaagagcgg aagaaagcgg ctggtacccc ggaagcagtc gctgcaactt ccgggaggtg 60
cttgtgtgcc tggtgcggga gctacggggc ccaggattg tgtttaaagt agtgcttcta 120
ccaacatgtc ccgtggttcc agcgccggtt ttgaccgcca cattaccatt ttttcacccg 180
```

64

```
agggtcggct ctaccaagta gaatatgctt ttaaggctat taaccagggt ggccttacat 240
cagtagctgt cagagggaaa gactgtgcag taattgtcac acagaagaaa gtacctgaca 300
aattattgga ttccagcaca gtgactcact tattcaagat aactgaaaac attggttgtg 360
tgatgaccgg aatgacagct gacagcagat cccaggtaca gagggcacgc tatgaggcag 420
ctaactggaa atacaagtat ggctatgaga ttcctgtgga catgctgtgt aaaagaattg 480
ccgatatttc tcaggtctac acacagaatg ctgaaatgag gcctcttggt tgttgtatga 540
ttttaattgg tatagatgaa gagcaaggcc ctcaggtata taagtgtgat cctgcaggtt 600
antactgtgg ggtttaaagc cactgnagcg ggagttaaac aaactggngt caaccagctt 660
ccttgaaaaa aaagtgga                                               678
```

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<210> 84
<211> 2803
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (572)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1926)
<223> n equals a,t,g, or c

<400> 84
caacatgagn aatccttctc ctccctctgg ctggcttgga aatscaaaan ctcytcgcaa 60
cgtcccgcaa raatctggtt gctctgccgg atggcatctc ggagctcttg attctcctcc 120
aggcarcgct ggagggtctc aggagcgccc tgttctgaag gcaggtgcag catggctggc 180
ttccccagag gagactcttc gcccagtacg tcctgatctg ctgccgggcc accactgggc 240
tgcaccatct cacacagttg gctcttccag aggtgcctat tcatccaaca gggcaagggc 300
tgtcagcaga gtccgtcaga cgtgagaagg gtgggagcgg cggactgtga acgctggtag 360
ggccccggcg ctccgagaaa gtcccagttt cgcggtcgcc cttccctacc acgcttccgg 420
cttccggtgt catagctgtg ggatccggaa gtaaaaacac aagccccgcs cccrrgaact 480
cgggaagccg gcgakaagtg tgaggccgcg gtagggncgc atcccgctcc ggagagaagt 540
ctgagtccgc cagctctgca ggcccgcgga antcgacagc gtcatggcag agcaggtggc 600
```

65

```
cctgagccgg acccaggtgt gcgggatcct gcgggaagag cttttccagg gcgatgcctt  660
ccatcagtcg gatacacaca tattcatcat catgggtgca tcgggtgacc tggccaagaa  720
gaagatctac cccaccatct ggtggctgtt ccgggatggc cttctgcccg aaaacacctt  780
catcgtgggc tatgcccgtt cccgcctcac agtggctgac atccgcaaac agagtgagcc  840
cttcttcaag gccacoccag aggagaagct caagctggag gacttctttg cccgcaactc  900
ctatgtggct ggccagtacg atgatgcagc ctcctaccag cgcctcaaca gccacatgaa  960
tgccctccac ctggggtcac aggccaaccg cctcttctac ctggccttgc ccccgaccgt 1020
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catcatcgtg gagaagccct cgggagggga cctgcagagc tctgaccggc tgtccaacca 1140
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ccgggacaac atcgcctgcg ttatcctcac cttcaaggag ccctttggca ctgagggtcg 1320
cggggggctat ttcgatgaat ttgggatcat ccgggacgtg atgcagaacc acctactgca 1380
gatgctgtgt ctggtggcca tggagaagcc cgcctccacc aactcagatg acgtccgtga 1440
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ccagtacgtg gggaaccccg atggagaggg cgaggccacc aaagggtacc tggacgaccc 1560
cacggtgccc cgcgggtcca ccaccgccac ttttgcagcc gtcgtcctct atgtggagaa 1620
tgagargtgg gatggggtgc ccttcatcct gcgctgcggc aaggccctga acgagcgcaa 1680
ggccgaggtg aggctgcagt tccatgatgt ggccggcgac atcttccacc agcagtgcaa 1740
gcgcaacgag ctggtgatcc gcgtgcagcc caacgaggcc gtgtacacca agatgatgac 1800
caagaagccg ggcatgttct tcaaccccga ggagtcggag ctggacctga cctacggcaa 1860
cagatacaag aacgtgaagc tccctgacgc ctacgagcgc ctcatcctgg acgtcttctg 1920
cgggganccag atgcacttcg tgcgcaggac gagctccgtg aggcctggcg tattttcacc 1980
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aacatctcga gccccctgga tgtccectgt cccaccaact ctgcactcca tggccacccc 2640
gtgccacccg taggcagcct ctctgctata agaaaagcag acgcagcagc tgggacccct 2700
cccaacctca atgccctgcc attaaatccg caaacagcca aaaaaaaaa aaaaaaaaa 2760
aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aag                       2803
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<210> 85
<211> 1278
<212> DNA
<213> Homo sapiens

<400> 85
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gccccgtgag gccctggcct tcatcatcag gagttttggt ggggaagtgt cctgggacaa  120
atctttgtgc attggggcca cctatgacgt cacagactcc cgcatcaccc atcagattgt  180
cgaccggcct gggcagcaga cctcagtcat tggcaggtgc tacgtgcagc cccagtrggt  240
gtttgactca gtgaacgcca ggctccttct ccccgtggca gagtacttct ctggggtgca  300
gctgcccoca cacctttcac cctttgtgac cgagaaggaa ggagattacg ttccacctga  360
gaagctgaag ctgctggctc tgcagcgggg agaggaccca ggaaacctga atgagtcaga  420
```

66

```
agaggaggag gaagaggacg acaacaacga aggtgatggt gatgaagagg gagaaaatga 480
ggaggaggag gaagatgcag aggctggttc agaaaaggag gaagaggccc ggctggcagc 540
cctggaagag cagaggatgg aggggaagaa gcccagggtg atggcaggca ccttgaagct 600
ggaggataag cagcggctgg cccaggagga ggagagtgag gccaagcgcc tggccattat 660
gatgatgaag aagcgggaga agtacctgta ccagaagatc atgtttggca agaggcgaaa 720
aatccgagag gccaacaagc tggcggagaa gcggaaagcc cacgatgagg cggtgaggtc 780
tgagaagaag gccaagaagg caaggccgga gtgagtgcct gcggcccctc acagggctga 840
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cagagtcact tctcctcctc ctttctccag ccagccctga cccctcatgc tctctggctg 960
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aggcccaccc agccccctac ctactgcccc cattcatcct ggctttccac agccccctcc 1140
cacacagttg gacccgtgat tctcagggtg ctgtgatggg gtgagggtag ggggagcatt 1200
tgttattaaa tgactggact tttgtgccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaccca cgcgtccg                                              1278
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<210> 86
<211> 2585
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2573)
<223> n equals a,t,g, or c

<400> 86

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accccggagt gtcccctttg gctcgattcc caggaaactc ctcctcaacc cctttggcat 120
cagcattaca agccaaagcc tcaatccagg gcccttttcgt actcctaaag cagggataag 180
gacctatcac ttccgctcca ccttggccga gttccaggtt ataatgggca ggaagagagg 240
aaatgtggaa aagggctggt tggcaaagct gggaccagat ggtgcagctt tcctgcagat 300
tcccgcagaa gagatccctg cctacatgtc tgtgcatcga ctcctgagga agctgctaag 360
tcgatatcgg cttccagtag caacccgaga gaaccctgtt atcaatgact gctgcagagg 420
tgctatgctt tccctggcca caggctggcc cactctggaa gcgacctctc tctgttagtc 480
ccagaaattg aagatatgta cagcagcccc tatctgcgcc cctcagaatc tcctatcacc 540
gtcgaggtca actgcaccaa tccaggcacc agatattgct ggatgagtac tgggctctac 600
atacctggaa ggcaaattat agaagtctca ctgcctgaag ctgctgcctc tgccgacctg 660
aagatacaga ttggctgcca cacagatgac ctgaccaggg ccagcaagct tttccgaggc 720
ccactcgtaa ttaaccggtg ctgcttggac aaacccacaa aatcgatcac gtgcctctgg 780
ggtggactcc tctatataat tgtgcctcag aacagcaaac tgggttctgt gcctgtcacc 840
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tgggatgagg tgatgcaggc tgtggcgcga ctgggagctg agcccttccc tttgcgcctg 1080
cctcagagga ttgttgccga cgtgcagatc tcagtgggct ggatgcatgc agggtacccc 1140
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gtcagaatct acctgagcaa gggtcccaat gtgaaaaact ggaatgcatg gmccgcactg 1440
```

```
gaaacgtatt tacagctcca ggaagccttt ggttgggagc cattcatccg tctcttcacc 1500
gagtacagga accagaccaa cttgcccaca gaaaatgttg acaaaatgaa tctgtgggtc 1560
aagatgttct cccaccaagt gcagaagaac ctggctccgt tctttgaggc ctgggctggc 1620
ccatccagaa ggaagtggct accagcctgg cctatctgcc tgaatggaag gaaaatatta 1680
tgaaattgta cctcctcaca cagatgcccc actgaaattg aagtcaagaa atgcaaaaag 1740
gaactgagca catctcagca aagaaaactg aagggatttg gttataagtg gagaggatct 1800
cagcatattt ctggaagata gaaagtggat gaagcatgat aatgaaagag tgaagaacct 1860
ttcagataaa atgtaagctg atctgaacaa cataacccca aagagacttg cgcacctgaa 1920
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gggggccttg aaaatatgac aaactctgag gggaaacaaa grcmatktgg gaaagawtaa 2460
cttaatttta attccatctc cagagagatt tgaggtgtat ttaagatgaa aaacaggata 2520
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ccccc                                                               2585
```

<210> 87
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (385)
<223> n equals a,t,g, or c

<400> 87
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gggtcgaccc acgcgtccgc atgaatttgt cacaatctta tcaataatca ttactctgtt 60
ttttatattt caactaaaag tatcaaaata tagctttcca gaaaaccccg aaccaaagtc 120
actgactaca tcaaagtcta ctacaccttg agaaaacaaa tgaacgaaaa tctattttcc 180
tcattcatta ccccaacaat aataggactc cctatcgtaa ttattatcac tatgtttcca 240
agcattatat tcccatcacc tacccgactr aatcaataat cgactscatc tccattccaa 300
caatgattag tgcactgaac atscaaaaca aatrttgatc catgccacaa ccaaaaagga 360
caaactggag cccggatatt gatan                                         385
```

<210> 88
<211> 2500
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (429)
<223> n equals a,t,g, or c

<220>

68

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<221> misc feature
<222> (1088)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (2480)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (2482)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (2491)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (2497)
<223> n equals a,t,g, or c


<400> 88
tcgacccacg cgtccgccca cgcgtccgtc tccaccgctg ctgccgccgc cctggccgcc 60
gccgcagtga aagctaagca cttggctgct gttgaggaaa ggaagatcaa atctttggtg 120
gccctgctgg tggagaccca gatgaaaaag ttggagatca aacttcggca ctttgaggag 180
ctggagacta tcatggaccg ggagcragaa gcactggagt atcagaggca gcagctcctg 240
gccgacagac aagccttcca catggagcag ctgaagtatg cggagatgag ggctcggcag 300
cagcacttcc aacagatgca ccaacagcag cagcagccac caccagccct gccccccaggc 360
tcccagccta tcccccccaac aggggctgct gggccacccg caktccatgg cttggctgtg 420
gctccagcnt ctgtagtccc tgctcctgct ggcagtgggg ccccctccagg aagtttgggc 480
ccttctgaac agattgggca ggcagggtca actgcagggc cacagcagca gcaaccagct 540
ggagcccccc agcctggggc agtcccacca ggggttcccc ccccctggacc ccatggcccc 600
tcaccgttcc ccaaccaaca aactcctccc tcaatgatgc caggggcagt gccaggcagc 660
gggcacccag gcgtggcggg taatgctcct ttgggtttgc cttttggcat gccgcctcct 720
cctcctcctc ctgctccatc catcatccca tttggtagtc tagctgactc catcagtatt 780
aacctccccg ctcctcctaa cctgcatggg catcaccacc atctcccgtt cgccccgggc 840
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gcgaccacca ccatgccatc ttccttgcct ctcgggccgg ggctcggatc cgccgcagcc 960
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ccagacccag gcacccccct gcctccagac cccacagccc cgagccccag gcacggtcac 1080
ccctgtgncc acctccacag tgaggagcca gccagacatc tctccccctc accccctgtg 1140
gacatcacgg ttccaggaac agccttccc ccaccactgg gaccctcccc agcctggaga 1200
gttcatcact acgtaaggaa agctccttcc gccctccaa agccctcacc atgcctaaca 1260
gaggcatgca tttttatatc agattattca aggacttctg tttaaaagat gtttataatg 1320
tctgggagag aggataggat gggaatgctg ccctaaagga agggctggtg aaaggtgttt 1380
atacaaggtt ctattaacca cttctaaggg tacacctccc tccaaactac tgcattttct 1440
atggattaaa aaaaaaaaaa aaagtagatt ttaaaaagcc acattggagc tcccttctac 1500
ccactaaaaa ataaccaatt tttacatttt ttgagggggga gtgagtttta ggaaagggga 1560
```

69

```
attaagattc cagggagagc tctggggata gaacagggcg cagattccat ctctccccaa 1620
gccccttttt agtgactaag tcaaggcccc aactcccctc ccccacccta cgctgagctt 1680
attcgagttc attcgtacta ataatccctc ctgcggcttc ctcattgttg ctgtttttagg 1740
ccaccccagc tcagccaatg attcctttcc ctctgaatgt cagtttgtt tttaaaagtc 1800
acttgcttag ttgatgtcag cgtatgtgta tttggtgggg aaaacctaat ttcggggatt 1860
tctgtggtag gtaataggag aagaaagggc actgggggct gttctccttc cttccctggg 1920
ctgtatccat ggactcctgg aaggcacaga gaagggagct ataagaggat gtgaagtttt 1980
aaaacctgaa attgtttttt aaagcactta agcacctcca tattatgact tggtgggtca 2040
ccccttagct tcctccctct cccaccaaga ctatgagaac ttcagctgat agctgggggc 2100
tccccagatg aggatgcagg gatttgggag cagtggaaga gggtgcccaa ccttgggttg 2160
gaccaaccct tggctcgcag ctcaactctg cttcccgcat tcctgctcca cgtgtcccag 2220
cttctcccct gtgacgggaa ggcaggtgtg actccaggct ctgcactggt tcttcttggt 2280
tcctcccacc aggccctttg ttcctcatgt ccccatgttt ctctccctct gcgtcttagc 2340
acctttcttc tgttcaaagt tttctgtaaa ttttctcttt ttttctttct ttcttttttt 2400
tttttttata aattaatttg ctttcagttc caaaaaaaaa aaaaaaaaaa aaaaaaaaa 2460
aaaaaaaaaa aaaaaaaaan tngagggggg ncccggnacc                        2500


<210> 89
<211> 1409
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (841)
<223> n equals a,t,g, or c


<400> 89
aggagtatgt atttcccgcc aagaagaagc tgcaggaata ccgggtctta attaccaccc 60
tcatcactgc cggcagttgg tctcggccca gtttcccatt gatcacttca cacacatctt 120
catcgatgag gctggccact gcatggagcc tgagaagtct ggtagctata gcagggctga 180
tggaagtaaa ggaaacaggt gatccaggag ggcagctggt gctggcagga .gaccctcggc 240
agctggggcc tgtgctgcgt tccccactga cccagaagca tggactggga tactcactgc 300
tggarcggct gctcacctac aactccctgt acaagaaggg ccctgatggc tatgaccccc 360
agttcataac caagctgctc cgcaactaca ggtctcatcc caccatcctg gacattccta 420
accagctcta ttatgaaggg gagctgcagg cctgtgctga tgtcgtggat cgagaacgct 480
tctgccgctg ggcggsccta cctcgacagg gctttcccat catctttcac ggcgtaatgg 540
gcaaagatga gcgtgaaggc aacagcccat ccttcttcaa ccctgaagag gctgccacag 600
tgacttccta cctgaagctg ctcctggccc cctcctccaa gaagggcaaa gctcgcctga 660
gccctcgaag tgtgggcgtc atctccccgt accggaaaca ggtggagaaa atccgttact 720
gcatcaccaa acttgacagg gagcttcgag gactggatga catcaaggac ttgaaggtgg 780
gttcagtaga agaattccaa ggccaagaac gaagcgtcat cctcatctcc accgtgcgaa 840
nagccagagc tttgtgcagc tggatctgga ctttaatctg ggtttcctta agaaccccaa 900
gaggttcaat gtagctgtga cccgggccaa ggcctgctca tcatcgtggg gaaccccctt 960
ctcctgggcc atgaccctga ctggaaagta ttcctggagt tctgtaaaga aaacggaggg 1020
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gagcgggagg gtgaaggggg cctgtctctg caagtggagc cagagtggag gaatgagctc 1200
tgaagacaca gcacccagcc ttctcgcacc agccaagcct taactgcctg cctgaccctg 1260
aaccagaacc cagctgaact gcccctccaa gggacaggaa ggctggggga gggagtttac 1320
aacccaagcc attycaccck cctccctgct ggggagaatg acacatcaag ctgctaacaa 1380
```

```
ttgggggaag gggaaggaag aaaactctg                                  1409
```

<210> 90
<211> 1336
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1284)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1317)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1333)
<223> n equals a,t,g, or c

<400> 90
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agaacagtac ctccctctca ctgaggaaga actagaaaaa gaagcaaana aagttgaagg 60
atttgatctg gttcagaagc caagttatta tgttagactg ggatccctgt ctaccaagct 120
tcactcccgt gcctaccagc aggctctcag cagggttaaa gaagctaagc aaaaaagcca 180
acagaccatt tctcagctcc attctactgt tcacctgatt gaatttgcca ggaagaatgt 240
gtatagtgcc aatcagaaaa ttcaggatgc tcaggataag ctctacctct catgggtaga 300
gtggaaaagg agcattggat atgatgatac tgatgagtcc cactgtgctg agcacattga 360
gtcacgtact cttgcaattg cccgcaacct gactcagcag ctccagacca cgtgccacac 420
cctcctgtcc aacatccaag gtgtaccaca gaacatccaa gatcaagcca agcacatggg 480
ggtgatggca ggcgacatct actcagtgtt ccgcaatgct gcctccttta agaagtgtc 540
tgacagcctc ctcacttcta gcaagggca gctgcagaaa atgaaggaat ctttagatga 600
cgtgatggat tatcttgtta acaacacgcc cctcaactgg ctggtaggtc ccttttatcc 660
tcagctgact gagtctcaga atgctcagga ccaaggtgca gagatggaca agagcagcca 720
ggagacccag cgatctgagc ataaaactca ttaaacctgc ccctatcact agtgcatgct 780
gtggccagac agatgacacc ttttgttatg ttgaaattaa cttgctaggc aaccctaaat 840
tgggaagcaa gtagctagta taaaggccct caattgtagt tgtttccagc tgaattaaga 900
gctttaaagt ttctggcatt agcagatgat ttctgttcac ctggtaagaa aagaatgata 960
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ctatggccat tgtgttgcct ctgttactgt ttgtattgaa taaaaacatc ttcatgtggg 1080
ctggggtaga aactggtgtc tgctctggtg tgatctgaaa aggcgtcttc actgctttat 1140
ctcatgatgc ttgcttgtaa aacttgattt tagttttttca tttctcaaat aggaatacta 1200
cctttgaatt caataaaatt cactgcagga tagaccagtt aaaaaaaaaa aaaaaaaaaa 1260
aaaaggggggg ccgcccaagg grtnccccccg aggggggccc cagctttacg cgtggcntgc 1320
gacgtccaaa gcnccc                                                1336
```

```
<210> 91
<211> 787
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (677)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (725)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (742)
<223> n equals a,t,g, or c

<400> 91
ggcacgagct gtggggctgt gggcctgtta cccccaggcg cacagctccc tccggctggg  60
cccaggctcc actcagtgac acggctcaag tctacatgga gctgcagggc ctggtggacc 120
cgcagatcca gctacctctg ttagccgccc gaagtacaag ttgcagaagc agcttgatag 180
cctcacagcc aggaccccat cagaagggga ggcagggact cagaggcaac aaaagctttc 240
ttccctccag ctggaattgt caaaactgga caaggcagcc tctcacctcc rgcagctgat 300
ggatgagcct ccagccccag ggagcccgga gctctaactc atcatcccca tcagttttcc 360
tccctctcag acctgtcttt gaggacaaac agatttgtca gctgtcaggg tgcagtggga 420
cgtcagagac tatgtggtcc atcgccttca ttgtgtaaat gaggacacag actggcttgg 480
tcgcagtgac tgtggtgtcc ttgagatgct cacattactg cccggcctgc ctcccacctg 540
gaagtctggg aatgaggaga ttgagataaa cttttgaaat cccaaacatg tctgtttatg 600
gctctttggt cccctttgct cccagtggtg acttttgtgc ttctgagttg tcccctgaga 660
gcttggtctg ggaaaanagg aaggaagggg tcctcactgg aggaagagga acctttctaa 720
gtcangggta aggggaatgg gnacagttgg ttcccggttc taacctcctt ttctggactg 780
acaagtg                                                          787

<210> 92
<211> 1657
<212> DNA
<213> Homo sapiens

<400> 92
cgcgtccgcc cacgcgtccg cccacgcgtc cggctactca gaggaagggg cggttggtgc  60
ggcctccatt gttcgtgttt taaggcgcca tgaggggtga cagaggccgt ggtcgtggtg 120
ggcgctttgg ttccagagga ggcccaggag gagggttcag gccctttgta ccacatatcc 180
catttgactt ctatttgtgt gaaatggcct ttccccgggt caagccagca cctgatgaaa 240
cttccttcag tgaggccttg ctgaagagga atcaggacct ggctcccaat tctgctgaac 300
aggcatctat cctttctctg gtgacaaaaa taaacaatgt gattgataat ctgattgtgg 360
ctccagggac atttgaagtg caaattgaag aagttcgaca ggtgggatcc tataaaaagg 420
ggacaatgac tacaggacac aatgtggctg acctggtggt gatactcaag attctgccaa 480
```

72

```
cgttggaagc tgttgctgcc ctggggaaca aagtcgtgga aagcctaaga gcacaggatc 540
cttctgaagt tttaaccatg ctgaccaacg aaactggctt tgaaatcagt tcttctgatg 600
ctacagtgaa gattctcatt acaacagtgc cacccaatct tcgaaaactg gatccagaac 660
tccatttgga tatcaaagta ttgcagagtg ccttagcagc catccgacat gcccgctggt 720
tcgaggaaaa tgcttctcag tccacagtta aagttctcat cagactactg aaggacttga 780
ggattcgttt tcctggcttt gagcccctca caccctggat ccttgaccta ctaggccatt 840
atgctgtgat gaacaacccc accagacagc ctttggccct aaacgttgca tacaggcgct 900
gcttgcagat tctggctgca ggactgttcc tgccaggttc agtgggtatc actgacccct 960
gtgagagtgg caactttaga gtacacacag tcatgaccct agaacagcag gacatggtct 1020
gctatacagc tcagactctc gtccgaatcc tctcacatgg tggctttagg aagatccttg 1080
gccaggaggg tgatgccagc tatcttgctt ctgaaatatc tacctgggat ggagtgatag 1140
taacaccttc agaaaaggct tatgagaagc caccagagaa gaaggaagga gaggaagaag 1200
aggagaatac agaagaacca cctcaaggag aggaagaaga aagcatggaa actcaggagt 1260
gacattccct tcactccttt tcctacccaa ggggggaagac tggagcctaa gctgcctgct 1320
actgggcttt acatggtgac agacatttcc gtgggatagg gaagatagca ggaagaaaag 1380
taaactccat agaagtgtca ttccactggg ttttgatatt ggcttagctg ccagtctccc 1440
atttgtgacc tatgccatcc atctataatg gaggatacca acatttcttc ctaatattct 1500
ataatctcca actcctgaaa acccctctct caactaatac tttgctgttg aaatgttgtg 1560
aaatgttaag tgtctggaaa ttttttttttc taagaaaaac tattaaagta cttcctagta 1620
ggaaaaaaaa aaaaaaaaaa aaacycgggg gttttct                            1657
```

```
<210> 93
<211> 485
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (478)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<400> 93
aattcggcac gaggggttct gcactaacag cctccaagcc ccctggcact tcttttgccc 60
tgagagtgtc ccagggggatt cagagtctcc agaaagatat ggctrggcca actctgttgc 120
ctacctrgcc tgacccagtc ggagcctgac atggtggagg gaaagggaga caagtggggc 180
tgcactcggt ccagaggcca gctaggaggg aaaccgcagc ttcctggggc ttgtgtgtga 240
agattcctga cttagggtg gcttttgttt acaagatgca agaggggaaa cctgtccccg 300
actcatcgag acaacatgcc cagttatcag ggagtcctgt gtcacaaggt ctgtctctgc 360
cattgtaagc aagtgccttg ggcgagctgg cctctgcccc acagtctcat ctgtacaccg 420
acagggttga tgcctccctc acagggttga gaacaagagc cakttggcca attaaaanaa 480
aaaan                                                              485
```

```
<210> 94
<211> 764
<212> DNA
<213> Homo sapiens
```

73

<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (565)
<223> n equals a,t,g, or c

<400> 94
cccccagccag tctgccctct gccatggggg gcggagagga cgaggaggag gccaccgact 60
atggagggac ctcagtgccg actgccgggg aggccgtgcg ggggctagaa acagctctgc 120
grtggctgga gaaccaggac cccagagagg tggggccact gaggctggtg cagttgcgct 180
cactcatcag catggcccgg angctggggg gcatcgggca taccccagca ggcccctatg 240
acggtgtgtg accaggccas cccagtgacc tttctcctgc tgcacttgga gggaggggac 300
atacacacag tctcccatct ctcctcccct cccctggggg tggcccaccg catgggtaca 360
gggggttcca ggaatccaaa tccagcatgg cttggaggag ctctgttggt gagaggtcgc 420
cctgcctcac tggcaccctg ggggcacagc tggaagagag gcctggccca tgctcctctc 480
agggcaggca catgtacggg gcatacaagg cacagcgcct gttggaacag gtggctgtgt 540
tcctgctctg gcccccgtgc ggctngcctc cgcccctgca ccagtcacat gcactggacg 600
agggccgaaa ctcctgtctg ctatcgagcc ctggtgctat gtggccccgg agccacagca 660
caatcatctc agtggcgaag cacaccactt gattctattt tttttaaca cattaaatct 720
gttttttaaag ataaaaaaa aaaaaaaaaa aaaaaaaaa aaaa   764

<210> 95
<211> 707
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<400> 95
atttaggtga cactatagaa ggtacgcctg caggtaccgt tccgnaattc ccgggtcgac 60
ccacgcgtgc catcatggcg caggatcaag gtgaaaagga gaaccccatg cgggaacttc 120
gcatccgcaa actctgtctc aacatctgtg ttggggagag tggagacaga ctgacgcgag 180
cagccaaggt gttggagcag ctcacaggc agaccctgt gttttccaaa gctagataca 240
ctgtcagatc ctttggcatc cggagaaatg aaaagattgc tgtccactgc acagttcgag 300
gggccaaggc agaagaaatc ttggagaagg gtctaaaggt gcgggagtat gagttaagaa 360
aaaacaactt ctcagatact ggaaactttg gttttgggat ccaggaacac atcgatctgg 420
gtatcaaata tgacccaagc attggtatct acggcctgga cttctatgtg gtgctgggta 480
ggccaggttt cagcatcgca gacaagaagc gcaggacagg ctgcattggg gccaaacaca 540
gaatcagcaa agaggaggcc atgcgctggt ccagcagaa gtatgatggg atcatccttc 600
ctggcaaata aattcccgtt tctatccaaa agagcaataa aaagttttca gtgaaaaaaa 660
aaaaaaaaaa aaaaaaaggg ggcccccttt tggggggtccc ctggggg   707

<210> 96

74

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<211> 815
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c

<400> 96
aacccccctac tccctnccgt aattttttgta agcccttaaa ataanaaatn aaaaatycca 60
taacccccaa agaagaatcc cccccacatt wagccttgtt aagtaaatgc ctcctgaccc 120
caagcccgaa gatgcccccc attctctwag tgatggcggc gttagggttt gagagaaggg 180
aatttggctc aacttcagtt gagagggtgc agtccagaca gcttgactgc ttttaaatga 240
ccaaagatga cctgtggtaa gcaacctggg catcttagga agcagtccct ggagaaggca 300
tgttcccaga aaggtctctg gagggacaaa ctcactcagt aaaacataat gtatcatcat 360
gaagaaaact gattctctat gacatgaaat gaaaatttta atgcattgtt ataattacta 420
atgtacgctg ctgcaggaca ttaataaagt tgctttttta ggctacagtg tctcgatgcc 480
ataatcagaa cacacttttt ttcctctttc tcccagcttc aaatgcaaat tcatcattgg 540
gctcacttct aataactgca gtgtttcccg ccttgggctt gcagcagaaa aacctgacaa 600
catagtgttt gctaaggcag taatttagac tttaccttat ttgtgattac tgtagtgatt 660
gattgattga ttactattaa ctacaaggta taatttacta tcaccttatt taaattttat 720
gaattaattt gaatgttttt tacactaact aacttttccc aataaagtcc actatgaaac 780
cacgacaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                             815

<210> 97
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (627)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (634)
<223> n equals a,t,g, or c

<220>
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75

<221> misc feature
<222> (635)
<223> n equals a,t,g, or c

<400> 97
catcattggc gcggggctgt cagcggccgg acgcggtcct ctacgcccgc cactacaaca 60
tcccggtgat ccatgccttc cgccgggccg tggacgaccc tggcctggtg ttcaaccagc 120
tgcccaagat gctgtacccc gagtaccaca aggtgcacca gatgatgcgg gagcagtcca 180
tcctgtcgcc cagcccctat gagggttacc gcagcctccc caggcaccag ctgctgtgct 240
tcaaggaaga ctgccaggcc gtgttccagg acctcgaggg tgtcgagaag gtgtttgggg 300
tctccctggt gctggtcctc atcggctccc accccgacct ctccttcctg cctggggcag 360
gggctgactt tgcagtggat cctgaccagc cgctgagcgc caagaggaac cccattgacg 420
tggacccctt cacctaccag agcacccgcc agragggcct gtacgccatg gggccgytgg 480
ccggggacaa cttcgtgagg tttgtgcagg ggggcgcctt ggctgtkgcc agctccctgc 540
taaggaagga acagaaccac ctacatcgcc aaccctggtc cagcctraga ggaatacatc 600
ctctgatcga cctcaaatcc ggagttnccc cttnncttgt caaattgacc gcccaata 658

<210> 98
<211> 249
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c

<400> 98
aaaatggtag acctgacagt accggtccgg caattcccgg gattttgagc tggggttttg 60
agactsccct tagagataga gaaacagacc caagaaatgt gctcaattgc aatgggccac 120
atacctagat ctccagatgt catttcccct ctcttatttt aagttatgtt aagattacta 180
aaacaataaa agctcctaaa aaatcaaaaa aaaaaaaaaa aaaaaaaaa aaccccgggg 240
ggggcccng   249

<210> 99
<211> 752
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (612)
<223> n equals a,t,g, or c

<400> 99
acggcttcaa ccgcagcttc tgcggccgca acgccacggt ctacgggaag ggcgtgtatt 60
tcgccaggcg cgcctccctg tcggtgcagg accgctactc gccccccaac gccgatggcc 120
ataaggcggt gttcgtggca cgggtgctga ctggcgacta cgggcagggc cgccgcggtc 180
tgcgggcgcc ccctctgcgg ggtcctggcc acgtgctcct gcgctacgac agcgccgtgg 240
actgcatctg ccagcccagc atcttcgtca tcttccacga cacccaggcg ctgcccaccc 300
acctcatcac ctgcgargca cgtgccccgc gcttcccccg acgacccctc tggrctcccg 360

76

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ggccgctccc cagacactta accgaagggg ccaccctctg gcctcctgct tcccaggctc 420
ccagctccgc acaggctgat gctccccgcc cccaactgtg gccgcctgag ctgtccccgg 480
ggasgccctg cctccctctg cgggctccag aaggcggtgt gggggatggc ggtcagcagc 540
ggccgagggg ggccgggcta ggtcccagcc tgggccgacc ccaccaccag gggtcagcag 600
agcccaggag gngacaccgy ccgcccgccg ctcccagacc tcgcccgagt cggctctgtt 660
gtttgaataa acgtgaacgt gaacccaggc ggaagggacc cgggaaaaaa aaaaaaaaaa 720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                              752
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<210> 100
<211> 3059
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (3019)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (3047)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (3058)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (3059)
<223> n equals a,t,g, or c


<400> 100
ggggtaaaac cccngaaaaa aactccanat tttaattaaa tggcctcctc ccttcccccc 60
ttctttcccc ccgtccccca actccctttc ctcgtcctct ttcccccenc ccctctccct 120
```

```
tttctcccca tctttcacct tcctaatttc agtgaaattg gagcgatttg aaattccaat 180
caaggttcga ttaagcccag agccatggac ccctgaaact ggtttggtaa ctgatgcttt 240
caaactgaaa aggaaggagc tgaggaacca ttacctcaaa gacattgaac gaatgtatgg 300
gggcaaataa aatgttgttg tcttattgac agttgtgcag gaggtagcct ggtggttttc 360
aacctctaga attttaagcc tttgttgaac tgttagaatg taaggtatat cattctaaag 420
atagagtaaa aagaaaacaa aaccaaaagt tattaaaatt gttgtccggt ttactttaac 480
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aaaaatattt aatgttgaac aaaataaatt ggagttggag tagaatgtag tttgaggaaa 660
tttgcagctt ccaatgcctc ttgtcttcct atttcagaag tttaaatatt aagcatgaca 720
gaaaatatgt attaacacta ctcaaagcaa aagtgctgca gggctttaaa attctcttcc 780
aaccatttat cttgaaggaa aaattcaata gtaatataat acmcaaaatc aaataatacc 840
ttagaaggta ttaagattat aattgttgca taggttagat atagagtcat tgtaatgttg 900
tgaataatta cagtgcctaa aataagaata gaacaacata tacaacacca aaaaatatct 960
agtaatatat ttaaagggaa attgagctgc tttttttgaa actttgagat ctaaaaataa 1020
ctgtaattat ttgaatgact aagaggaaag tacatttttt gaaatgctga aaattgcctt 1080
tctgtgttta ttcaaactga aaagctgaga ccaagagcaa ggaaggtaaa aagttaacag 1140
gcaaacattt tctcttagaa aaggtgataa aatcataagt atttggaatt agaacccttk 1200
cacagcactg aacctgggaa agagatttaa actctgaatt tatctttgat aacagggatt 1260
gattttaaaa tgtacatgta ttaaattaca tttgtaattt aaggtctgtt tgctgttgct 1320
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gactgatgtt tgtgcagtaa cttgggagtg tggtttcttt ttgaatcttt aattaaaacc 1620
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aaatcttaat actgttattc tttgcacttt ttcttaatca ttttttatat atatgcatat 1740
atatatgtgt gtgtgtgtgt tgcttatgtt gttttgtaca gatgtgggcc accattgcaa 1800
caaaatacat tcttttttgct ctaaaatatt tatgaagaaa atacttaaat gttatgtata 1860
tggtggtaat aagggaaaaa tcaagtatta taaacaagaa tgaaggtttt tgtaaagatt 1920
tctgttcagc gtttttgcaag gtaaaatttt aggcaagttt tccctgaagt tatgtgtatg 1980
tgagtattct cattcttccc aacttgcctt tgaagagtga aataccatta ttatcaagta 2040
gactactgtt cagctttat tcctgccctg ctgtttatcc cttaagaatg agtttcttag 2100
acttttccaa tatgtgattt ttttttcccat ttagaatggt gattttaaat gtgtgagtgc 2160
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aacactgcca actgatctgt tataggtcct ttagaaacac ataattaaca cttaaggttg 2280
ggtgctgcta attctttgca aaaatccaaa tattgttaag ggaccaggga gatgccacta 2340
cccttgatt ttccatctaa aaatatacat gtttatgtaa acaaatcttt ccatatccat 2400
agtgactttt caagtattta agcctaaaga ttttgatctc acatttttat acctgtttaa 2460
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tcctgcctcc ttgatatttg tatttattct ttttttctct agagtagagg tataattgtg 2640
tgatatttca gaaatacaga taaatgattc aaaaagtcac agttaaggag aatcatgttt 2700
ctttgatcat gaataactga ttagtaagtc ttgcctatat tttcctgata gcatatgaca 2760
aatgtttcta aggtaacaag atgagaacag ataaagattg tgtggtgttt tggatttgga 2820
gagaaatatt ttaattttta aatgcagtta caaattataa tgtattcata tttgtacttt 2880
ctgttaaaat gcatgattgc agaattgttt agattttgtg tttattcttg atgaaaagct 2940
ttgtttgttc ttgtttttaa gtttgcactc aaatcttaag aaataaatcc acccatgtta 3000
tcaaaaaaaa aaaaaaaanc ccggggggg gcccggaacc aaatccncc aagggggnn 3059
```

<210> 101

78

<211> 1682
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c

<400> 101
```
ggcacgagga tggawgcctg atggggtgca gacacagatg gcaccccagg rntgtgccat 60
tccaccagac gtctcctaag acagagttag agtcaacaat ctttggcagt ccgaggctgg 120
ctagtgggct cttcccagag tggcagagct gggggagaat ggagaacttg gcctcttatc 180
gatgaattaa gcaacaatgt aactggtctt gacttgtcat attcccccat gcaatcctag 240
gtctgtattg ctcaattta ggaagccttt gctactccat cagtaggttt agatttgagc 300
ttttgagacc tggctatgga aaagaaagac acttgagaat ttagtgttgg ggtctgtaca 360
gatgatgcta cccaatttgg ctttgaagga tcaagtaaca ggttgaaaac tatttttata 420
aaggtaatac tttttcagtt cccttcttcc ttccctctca atccactagc tttcatgttg 480
ggcaaggaaa agttgaggaa ggatggctga tggtgatgga aagctgtgtt aatggtatga 540
ggaatgtgtg aaaagtatac acaaagggct ctgaagctca agtcagagga gtgggaggtc 600
tgatcattgt tggtggaaaa acgtaaggtt attttgtgtt tttaagttgg ttttacaatt 660
ctttcctggg gaaattattt ctggagggga aaaagatcca ttctacgtat ccttgtggag 720
aaaagctaaa taacctttaa gaatgtgggt ggtattggag aaagaagatg aattatagct 780
ccggagaatc aagatcttaa gtgaagcctt tctgttcaga tgtgatctat aaaaaatcat 840
aatttgggga aagtttaagc aaatctggct ttgtagtcct gatgttataa gtgactttgt 900
gatcaaactg tcaggcttgg gttcttgtta tagaatgctt ggtatagaaa aaccatgcca 960
tcattaatgg ctaacaacac gtagggactt catgtcatgt caaagatagc tctttgcaag 1020
tgccttgatt aaaccagaaa actgtcatcg tttaacccaa atatctgaat ggtcatctgg 1080
taactcatgg gtttttggcc tcataagatg gtccactctg tacacaggca ttcctcctgc 1140
aataatgttg tatctttgag accgttgtca gtgtacacaa ctcacatcct tcatattgaa 1200
ggtgactcat ttttctgcac acttttttga tgtgatgctt gacgtgaggc ccgacactag 1260
gattctcaat gcaagaatcc agtaccttgc acatagaagt agcaacccat cccttgccta 1320
ttttcatctt gctgttttct ttttttttaa aaaatggatg tgacttgttt tgaatgtttt 1380
gtattatact tgtttttgtg tgtgcataaa ttcattctgt aggatcttaa gaaaaagagt 1440
cccagaatgt tgcttctatt attgtgcaca accattgaga ggtgttacaa gaatgcagtt 1500
aattttaaca tgtgtgatgt gccatggtgg aaaagtacta tcggaataac tctgcagtga 1560
cagaatttga agtttggcta gcatccatac ttttctactg taaatatttc actctcctct 1620
agctatcctt gatgagcttc tcactttaag aataaatgtg tttgatataa aaaaaaaaaa 1680
aa                                                              1682
```

<210> 102
<211> 938
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c

<220>

```
<221> misc feature
<222> (812)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (913)
<223> n equals a,t,g, or c


<400> 102
cccacgcgtc cgtccgggtg ctcgcgcgcn gacctggacg cagagaagcc agagactttc 60
gcttccggct gccgcaggct tcgctggtgc aggtaagctc cgcacactct cggccggtcc 120
cgagtccgac tccctcaagg gtgacgcgag ctctgccctt taaccggaaa cgtctccctg 180
ctcaccccac ccccgcgcag acgcagtgct gagcacacag ctaccggaca aagagtgacg 240
cccggagctg gagttatggc ggctacggag ccgatcttgg cggccactgg gagtcccgcg 300
gcggtgccac cggagaaact ggaaggagcc ggttcgagct cagcccctga gcgtaactgt 360
gtgggctcct cgctgccaga ggcctcaccg cctgcccctg agccttccag tcccaacgcc 420
gcggtccctg aagccatccc tacgccccga gctgcggcct ccgcggccct ggagctgcct 480
ctcgggcccg cacccgtgag cgtagscctc aggccgaagc tgaagcgcgc tccacaccag 540
gccccgccgg ctctagactc ggtcccgaga cgttccgcca gcgtttccgg cagttccgct 600
accaggatgc ggcgggtccc cgggaggctt tccggcagct kcgggagctg tcccgccagt 660
ggctgcggcc tgacatccgc accaaggagc agatcgtgga gatgctggtg caagagcagc 720
tgctcgccat cctkcccgag gcggctcggg cccggcggat ccgccgccgc acggatgtgc 780
gcatcactgg ctgagcggtg gagctgcggg cngccagggc cgggcgctct gtgcggactg 840
gggccatgat cgggcccggg ggcctgagcc tgggacccca ccccgtgtta atgaaaaatg 900
agttttggca gcnaaaaaaa aaaaaaaaaa aagggcgg                         938


<210> 103
<211> 2012
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1993)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (2002)
<223> n equals a,t,g, or c


<400> 103
gctggataat tccagcctgt tagctactca caggaacatg cagaattatt ggctccaggg 60
agttttggag aaagaaggtt tacgttttca aacttacaga taacagttga catcaatgct 120
tctctttccc agaacaatct ggagtttgcc agaaaactct gtaaacagga gtcgtgctgt 180
gtgtgaactg taaactcttc tctccaggcg tcgaggggac ctttgcttta ctttgcagct 240
gggctacatc agacgtgtgc attggaaaca taaacttcct taactgggaa aagaatgctt 300
ctctgtcttc maaatarttc tgctatgtga cattttttgcc atcatgaatt ttacatcagt 360
gmtagctctt tgttttacgt gtttcattkg gcaggtcaca aaggctcttg gctaccacac 420
atacgtgcat acacacacac acacacacac acacacacac acacactcat aaaggatttt 480
```

80

```
cttttctgct ttacctttaa ttttcagtct acttggcttg taatgaaagg tagagcctta 540
tttttgaact atatcccaac agaatcgaat ttccattttg ccaagaatta taaaaccctg 600
aggttttaaa attcagtttc ttttctgggg atttaacatg gaaggacttg gagggcaaat 660
ggsccagtga ttggaaargg gaaaaacaaw tcatttcatt taaaattatt caataaccat 720
tgccagcatt tgggattctg agtgctgttt atgaagccct ttcattgata taatttcatc 780
tatctctcac aaggctgtaa gcaattccta tgtccatatg gcagtgagga aatggagatt 840
tgagcaggtt aagggagttt tcacctggaa gctcttcttt tttttccttc tgccacagta 900
rggtcatcag actgtcagcc ccagcactgg gagccgagta acacgcatgt tctcattaat 960
atccttttct catgttttta ttaaagatat atgcaagttg ccgaaagacg aaggaacttg 1020
cagggatttc atattaaaat ggtactatga tccaaacacc aaaagctgtg caagattctg 1080
gtatggaggt tgtggtggaa acgaaaacaa atttggatca cagaaagaat gtgaaaaggt 1140
ttgcgctcct gtgctcgcca aacccggagt catcagtgtg atgggaacct aagcgtgggt 1200
ggccaacatc atatacctct tgaagaagaa ggagtcagcc atcgccaact tgtctctgta 1260
gaagctccgg gtgtagattc ccttgcactg tatcatttca tgctttgatt tacactcgaa 1320
ctcgggaggg aacatcctgc tgcatgacct atcagtatgg tgctaatgtg tctgtggacc 1380
ctcgctctct gtctccaggc agttctctcg aatactttga atgttgtgta acagttagcc 1440
actgctggtg tttatgtgaa cattcctatc aatccaaatt ccctctggag tttcatgtta 1500
tgcctgttgc aggcaaatgt aaagtctaga aaataatgca aatgtcacgg ctactctata 1560
tacttttgct tggttcattt ttttttcccct ttagttaagc atgactttag atgggaagcc 1620
tgtgtatcgt ggagaaacaa gagaccaact ttttcattcc ctgcccccaa tttcccagac 1680
tagatttcaa gctaattttc tttttctgaa gcctctaaca aatgatctag ttcagaagga 1740
agcaaaatcc cttaatctat gtgcaccgtt gggaccaatg ccttaattaa agaatttaaa 1800
aaagttgtaa tagagaatat ttttggcatt cctctaatgt tgtgtgtttt tttttttttgt 1860
gtgctggagg gaggggattt aatttttaatt ttaaaatgtt taggaaattt atacaaagaa 1920
acttttaat aaagtatatt gaaagttaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aaaaaaaaaa aanaaaaaaaaa anaaaaaaaa aa                              2012


<210> 104
<211> 1094
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c

<400> 104
tcctcctggg aagcctggcc tgcctncccc gcaaaaggtg tttttgcgct ggttcaatga 60
atagatgatg cagaggcccc attggagaca cgtgaatggc gtgtgcggcc atcagttccc 120
ggctggggggg caggtgttgc ttcggcccccc gccctccggc cggcgtgtgc gagtgcgccc 180
ctggctgtga gtgttgaccg ttcctctccc ctgtacatag cmcgagccag tcctgagtgg 240
gtgactcctg agtgggtgac gcgcagacgg gatttctcag gtcatttgta tggtcgacat 300
gatggctgct gctttggctg ccaccacccc cgggcccagc ctgtctgaaa ttcagggttt 360
aggccgaaaa acccggtggg gaggggtggg gagccggagm tctgtggcgg ggctggaggg 420
ctggggtgca ctttagtttg gggcgggacg ggagccgccg ttgtgactgg cgtggtctgg 480
ctgctgctcc cgaacgagg ggtcgggggtt ggcttgctgg ccctcagag cccagtgggt 540
ggctctgact cggctcccta ctccctgcac ccagctgggc gcacttgggg cctgcggtct 600
gaatgtatcc ctcccctcag ttttaacctg agctgccgaa cgcacagtgg gccgggggcg 660
aggctggggg aagcggggcc caattacgga tcccgggagt tacaggtgcc gacgtgatgt 720
cgcttctctg gtgcccagct cccttcctgg tctgagacta gctctggggg tggcgggggc 780
```

81

```
ccccamacgc tgctcccgct ccaccctgcc cgtgctgctg ctctgtgcct gctgtcagag 840
ccctggtggg ggaggatgtg gccaccctga gacccggagg agacgggcgt ctgcctgggt 900
ttgcggagag ccgcttatgg gtgtggtccg tccagacacc ttgtttcaag ggggatgggc 960
gtgagcgggc aagcagagca tccccaccgc tgagcaagaa cttttttcttg tttttaaacc 1020
atcacgtcct catttcacat tggaataaag tgagttttttg aaacctgcga aaaaaaaaaa 1080
aaaaaaaaaa attc                                                    1094
```

<210> 105
<211> 2297
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (30)
<223> n equals a,t,g, or c

<400> 105
```
agctcgtgcg cccgccgtgc cggtccggan attcccgggt cgacccacgc gtccgatctg 60
tcctgcacca tctgcctaat tccttcctca cagtctgtag ccatctgata tcctagggga 120
aaaggaaggc caggggttca catagggccc cagcgagttt cccaggagtt agagggatgc 180
gaggctaaca agttccaaaa acatctgccc cgatgctcta gtgtttggar gtgggcagga 240
tggagaacag tgcctgtttg ggggaaaaca ggaaatcttg ttaggcttga gtgaggtgtt 300
tgcttccttc ttgcccagcg ctgggttctc tccacccagt aggttttctg ttgtggtccc 360
gtgggagagg ccagactgga ttattcctcc tttgctgatc ctgggtcaca cttcaccagc 420
cagggctttt gacggagaca gcaaataggc ctctgcaaat caatcaaagg ctgcaaccct 480
atggcctctt ggagacagat gatgactggc aaggactaga gagcaggagt gcctggccag 540
gtcggtcctg actctcctga ctctccatcg ctctgtccaa ggagaacccg gagaggctct 600
gggctgattc agaggttact gctttatatt cgtccaaact gtgttagtct aggcttagga 660
cagcttcaga atctgacacc ttgccttgct cttgccacca ggacacctat gtcaacaggc 720
caaacagcca tgcatctata aaggtcatca tcttctgcca cctttactgg gttctaaatg 780
ctctctgata attcagagag cattgggtct gggaagaggt aagaggaaca ctagaagctc 840
agcatgactt aaacaggttg tagcaaagac agtttatcat caactctttc agtggtaaac 900
tgtggtttcc ccaagctgca caggaggcca gaaaccacaa gtatgatgac taggaagcct 960
actgtcatga sagtgggggag acaggcagca aagcttatga aggaggtaca gaatattctt 1020
tgcgttgtaa gacagaatac gggtttaatc tagtctaggc accagatttt tttcccgctt 1080
gataaggaaa gctagcagaa agtttatttta aaccacttct tgagctttat cttttttgac 1140
aatatactgg agaaactttg aagaacaagt tcaaactgat acatatacac atatttttttt 1200
gataatgtaa atacagtgac catgttaacc taccctgcac tgctttaagt gaacatactt 1260
tgaaaaagca ttatgttagc tgagtgatgg ccaagttttt tctctggaca gkaatgtaaa 1320
tgtcttactg gaaatgacaa gttttttgctt gattttttttt tttaaacaaa aaatgaaata 1380
taacaagaca aacttatgat aaagtatttg tcttgtagat cagggtttttg ktttgktttt 1440
ttaattttaa aatgcaaccc tgcccCCtcc ccagcaaagt cacagctcca tttcagtaaa 1500
ggttggagtc aatatgctct ggttggcagg caaccctgta gtcatggaga aaggtatttc 1560
aagatctagt ccaatctttt tctagagaaa aagataatct gaagctcaca aagatgaagt 1620
gacttcctca aaatcacatg gttcaggaca gaaacaagat taaaacctgg atccacagac 1680
tgtgcgcctc agaaggaata atcggtaaat taagaattgc tactcgaagg tgccagaatg 1740
acacaaagga cagaattcct ttcccagttg ttaccctagc aaggctaggg agggcatgaa 1800
cacaaacata agaactggtc ttctacactt tctctgaatc atttaggttt aagatgtaag 1860
tgaacaattc tttctttctg ccaagaaaca aagtttttgga tgagctttta tatatggaac 1920
ttactccaac aggactgagg gaccaaggaa acatgatggg ggaggcagag agggcaagag 1980
```

```
taaaactgta gcatagcttt tgtcacggtc actagctgat ccctcaggtc tgctgcaaac 2040
acagcatgga ggacacagat gactctttgg tgttggtctt tttgtctgca gtgaatgttc 2100
aacagtttgc ccaggaactg ggggatcata tatgtcttag tggacagggg tctgaagtac 2160
actggaattt actgagaaac ttgtttgtaa aaactatagt taataattat tgcattttct 2220
tacaaaaata tattttggaa aattgtatac tgtcaattaa agtgttttg tgtaaaaaaa 2280
aaaaaaaaaa actcgta                                                  2297
```

<210> 106
<211> 442
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (419)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c

<400> 106
```
tcgacccacg cgtccgcctg tgggacgcgg tggtggccgt tgggtcggga gagtgagcgg 60
tatttgcmtc gtttttcttg cttgttttcc ccccgttaga ctttgtcggt agagcgcggt 120
tatgggccgc aagaagaaga agcagctgaa gccgtggtgc tggtattgta atagagattt 180
tgatgatgag aagattctta tacaacacca aaaagcaaaa cattttaaat gtcatatatg 240
tcataagaag ttgtacacag gacctggctt agctattcat tgcatgcagg tgcataaaga 300
gacaatagat gctgtaccaa atgcatacct gggagaacag acatkgattg gaaatatatg 360
gtatggaarg tattccagaa aaagatatkg atgaaagaag acgacttctt ggaacagana 420
acnccagaga gtccaaaaaa ag                                             442
```

<210> 107
<211> 1019
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (995)
<223> n equals a,t,g, or c

<400> 107
```
ttgatctgcg gctgtcgagg cctgaggcag tggaggctga ggctatgatg gcggccatgg 60
cgacggctcg agtgcggatg gggccgcggt gcgcccaggc gctctggcgc atgccgtggc 120
tgccggtgtt tttgtcgttg gcggcggcgg cggcggcggc agcggcggag cagcaggtcc 180
cgctggtgct gtggtcgagt gaccgggact tgtgggctcc tgcggccgac actcatgaag 240
gccacatcac cagcgacttg cagctctcta cctacttaga tcccgccctg gagctgggtc 300
ccaggaatgt gctgctgttc ctgcaggaca agctgagcat tgaggatttc acagcatatg 360
gcggtgtgtt tggaaacaag caggacagcg ccttttctaa cctagagaat gccctggacc 420
tggccccctc ctcactggtg cttcctgccg tcgactggta tgcagtcagc actctgacca 480
```

83

```
cttacctgca ggagaagctc ggggccagcc ccttgcatgt ggacctggcc accctgcggg 540
agctgaagct caatgccagc ctccctgctc tgctgctcat tcgcctgccc tacacagcca 600
gctctggtct gatggcaccc agggaagtcc tcacaggcaa cgatgaggtc atcgggcagg 660
tcctgagcac actcaagtcc gaagatgtcc catacacagc ggccctcaca gcggtccgcc 720
cttccagggt ggcccgtgat gtagccgtgg tggccggagg gctaggtcgc cagctgctac 780
aaaaacagcc agtatcacct gtgatccatc ctcctgtgag ttacaatgac accgctcccc 840
ggatcctgtt ctggccccaa aacttctctg tggcgtacaa ggaccagtgg gaggacctga 900
ctcccctcac ctttggggtg caggaactca acctgactgg ctccttctgg aatgactcct 960
ttgccagcty tcactgacct atgaacgact ctttngtacc acagtgacat taaagttat 1019
```

```
<210> 108
<211> 711
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (642)
<223> n equals a,t,g, or c

<400> 108
cttgaaaact tagtttacta tacatcttgc cctattaata tgttctctta acgtgtgcca 60
ttgttctctt tgaccatttt cctataatga tgttgatgtt caacacctgg actgaatgtc 120
tgttctcaga tcccttggat gttacagatg aggcagtctg actgtccttt ctacttgaaa 180
gattagaata tgtatccaaa tggcattcac gtgtcactta gcaaggtttg ctgatgcttc 240
aaagagctta gtttgyggtt tcctggacgt ggaaacaagt atctgagttc cctggagatc 300
aacgggatga ggtgttacag ctgcctccct cttcatgcaa tctggtgagc agtggtgcag 360
gcggggagcc agagaaactt gccagttata taacttctct ttggcttttc ttcatctgta 420
aaacaaggat aatactgaac tgtaagggtt agtggagagt ttttaattaa aagaatgtgt 480
gaaaagtaca tgacacagta gttgcttgat aatagttact agtagtagta ttcttactaa 540
gacccaatac aaatggatta tttaaaccaa gtttatgagt tggttttttt cattttcyat 600
ttgtatttta ttaagagtgc ttttcttatg gtgattttt tnaattgcga tttgatatgg 660
tttggccata tggccccacc caaatcccca tcttggatta taatccccat g         711
```

```
<210> 109
<211> 743
<212> DNA
<213> Homo sapiens

<400> 109
tcgagttttt tttttttttt ttttactttt taaaatttta ttgatgtacc acctgatcaa 60
agcatgggat attttaatag tattatacat aatattttta catagaaaac tttacatagc 120
atttcatatt atataattct gcttattctt tcaaaaattt atacatccat tgggcaagga 180
atggttttca ttaaattacc aatattaaat gcacttaatc attgtgtata ggttaaacca 240
aagtaactat taactaactt ttaggcattt taaggaggta aaacatacat tttacacata 300
aatatttgat gcaaatatgc agataaaatt ttttaaaaat tagaacactg agtaaaacac 360
ctttgataga ttatattgtt ttgttttgag agcaaggatt tccagatatg ttcattcttt 420
aaaacactca gctttggttt ctttgtttcc caaactgcaa agctgctgat aacaaaactc 480
caggattcca tgtgagttca gctatgtcta ctttaacaca aatattaaaa cagaattcag 540
raaatgcagt attaaggatc cagcttctat tgaaaccaat atccatttgc atcataacaa 600
caaacatttg aatgagatgg tcacacttgt acttatcagc aggttccttt aataacaaag 660
```

84

```
actactaaat gtatatcctt aatcacaaaa gaacaacaaa aaaaatacag gttttttttt 720
tttcatttcg tacaaaagtc acc                                      743
```

```
<210> 110
<211> 795
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (645)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (737)
<223> n equals a,t,g, or c
```

```
<400> 110
tnctaaatat cagatgtctt tgatgtaagg gtagggaatg gagaaatatt ttcaattgtg 60
tatttgtatt acaaagaact tgaaatttac tttcttagtt gattatatta aatgatgtat 120
atattatatg tggtttataa gctcaacact ggccattttt ttagtttat tgttaaatgg 180
tatttttcta tgtttaatta taatagatct ggcttttct ggatagcata aagatcactg 240
aactatatat atataagara caagagttct attttagcac aaaggcattt tatattattt 300
attgaatcca taagtttgtt ttcgtcaaaa acattccata ttatttctgc tccttttat 360
ttgtatagtt tgttatttaa agaaatggca gtccttcctg ttcttaatac aataaaattg 420
aaataatgca cctagtaatg tggccgacat ctcttctcac caccatggac tgttttcaac 480
aacagttgat cttctggtct gtgctgagag gcgcatgcat gtctttcgtc acgtcgggca 540
gcacacctgc tgtgaaatac tgctttcatc tacctcttca gaaggcttct tgcttgttga 600
caagtaccgc aaaggcttta ttctggactg gctatctcat aaaanggatt tctgtaagac 660
tttgcagtgt cattccctca gaaccyaggt ttgtttctaa agccacggta ttgtccrrgr 720
rcccctgtgt ktggggncag gtagctatcc ctcccatgtc attagtaatc ctttaggatt 780
ttaaggtaca atggg                                                795
```

```
<210> 111
<211> 1332
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
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85

<400> 111
ncgggncagc agctcccagt gtgacctgac aaaaacacgt aggggcaggg acggtcccca 60
cccccaggga cacaacccct ggtcttggac cagtagagga cacggagggt tcagacccct 120
cctcagaccc tccccacatc tgaaactgcc tccccccaac caccagcagc agcagggccc 180
tcctcccca ccagctctcc ccacagggcc cctcagcatc atggagaccc gcagcggggc 240
ttagccaccc ctcaaaccca gggcccctg gcacctgggc tctggccgtg ttttctggcc 300
agagccccac tttcctaact cgtgctccct tccgccttct tttccgtact gtgaagaaag 360
aactctccac cccagctccc accctgccct ggcctgggtg gaggaactgt gcctccatcc 420
ccagaagaaa cagccccctc tgctgctggg gtgggactgt ctgtgtgccc tgtgggggtc 480
cgtgtgagca ggcccacctg gctccagacc cgcccccaac ctgagacaga accaggctga 540
gccaggcctc cacccccacc cccgtttgct gggggctcct ccagccgccc ccatggraag 600
aggcctggta ccgsctcacc cacagaggtc tgtgccaggt gcgcttctgc aggtggagcc 660
aagctctccc tgaggccaga ggcggggcct gggccgggag cccaggggaa ggccaggctg 720
gaccccggct ycacacccac atccagcctg caggcctctc tgcagtcctc tcaccctccc 780
tmagctcccc ttcctctgca gtcaccctca gctccccttc cttgcccgcc tctccccccg 840
ccgccccacc agttaaacgg atgaccaaag acctttctta tgccggaagc aaaaaccaaa 900
actttttgtt ggcttttttcc tttgtsgcct ccccagcacc tgccctccca gtctcccacc 960
ccggccccag gctggaagcc tccctccact taagttattg ttttaaacca aagtttacag 1020
tgtctgttgg tggccaagac cttctctctc cacccctcct ccatccaccc tgaggaccct 1080
ggggctcagt ggaggcaggg ccctgcccccc cttcccttttc cggctcctgg cccagcctgg 1140
ggggaaggga raaagggagg gggaraaagc ggggttcttc accccctcag ggantggggc 1200
acggggagcc ctttcttccc tggaccctgg ggcttgnttc ntggggggc tcttccaaga 1260
accccctcttc taagggaacc aagtttcacc cgttcgtggn tgggggatgt tgggatttct 1320
aaggcaaaag ag   1332

<210> 112
<211> 743
<212> DNA

86

<213> Homo sapiens

<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (590)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (618)
<223> n equals a,t,g, or c

<400> 112
ttgctggtct gatccatgca catggccagg ctgctaggct cttgtgctgg gcnggaagtc 60
ggtgcggatg gccagctcca ggatgacccg ccgggacccg ctcacaaata aggtggccct 120
ggtaacggcc tccaccgacg ggatcggctt cgcatcgccc ggcgtttggc ccaggacagg 180
gccacgtggt cgtcagcagc cggaagcagc agaatgtgga ccaggcggtg gcacgctgca 240
rggggagggg ctgagcgtga cgggcacctg tncantgntg gggaaggcgg aggaccggga 300
gcggctggtg gccacggctg tgaagcttca tggaggtatc gatatcctag tctccaatgc 360
tgctgtcaac cctttctttg gaagcataat ggatgtcact gaggaggtgt gggacaagct 420
ctggatggac aaggaaaaag aggaaagcat gaaagaaacc ctgcggataa gaaggttagg 480
cgagccagag gattgtgctg gcatcgtgtc tttcctgtgc tctgaagatg ccagctacat 540
cactggggaa acagtggtgg tgggtggagg aacccgtcc cgcctctgan ggaccgggag 600
acagcccaca ggccagantt gggctctagc tcctggtgst gttcctgcat tcamccaytg 660
gscttttccc acctytgytc amcttactgt tcacctcatc aaatcagttc tgccctgtga 720
aaagatccag ccttccctgc cgt   743

<210> 113
<211> 1690
<212> DNA
<213> Homo sapiens

87

<220>
<221> misc feature
<222> (1659)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1664)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1676)
<223> n equals a,t,g, or c

<400> 113
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aattcggcac cactcagtcc cacaggcctc ggccagggac acaccggcca cgtccgcttc 60
ttggctgcag tccagctgcc agatggcttc aacctgctct gcccaacccc accacctccc 120
ccagacacag gccccgagaa gctgccatca ctggagcacc gggactcccc ttggcaccga 180
ggccccgccc ctgccaggcc taaaatgctg gttatcagtg gaggtgatgg ctatgaggac 240
ttccgactca gcagtggggg cggcasagca gtgagactgt gggtcgagac gacagcacaa 300
accacctyct cctgtggagg gtgtgaccct gtctgccgtg gcccaggact sgcccgccca 360
cctgccttca gcctgcttgc ctctccctag cccacacgca gactttgacc aggagtatcc 420
agccagggga cacatgtgcy kgcrtgggct ctgcttgtct tcgcggaaga ttcctgatgg 480
aacacccact ggccagccag gccatggctt ctcccgaccc tctggctgcc ccggtgcttc 540
cagtcatgat cgggtggggg acatgtgggc tgaccaggac ctctgaccct ggagcttcta 600
ccaaagacac agctgggtct ggaccccacg ggsstgggga gggccatgtg caatatttgg 660
agggtttct ggagggcagc aggaaggctg gggaattccc catgtacagt atttatgttt 720
ctttttagat gtgtaccttc ccaagcactt atttatgcag tgacctggtc acctgggggtg 780
ggggtgattt gaggaaatga catgaggaaa agaaacctat tcctgccctg gggaccaccc 840
tgggactcta accaagcctt cctggaggga cccatgcgcc cctgagcccc attccattca 900
tacagacaca cacgtacgca cactgcatgt ccaaggccct aaacattgcc cgttgacata 960
aactttccag ggccccagcc tgatgggggct gccctcagtc ctctagatca agatgctgac 1020
tattaggggg cagtgattgc catctgggga cctgtcaggc tttgtcatt cccagtttgt 1080
tggtggtgcc tttagtggtt ccctaatttg ggaacactga tggggccttg gacagggctt 1140
tctctcaggt aggagaaatg ggcccatgat ctcctcacag tcgcccccag tccttggccc 1200
tgcttccctg tgtctcatgc actggcacat atggtcacct tggagggcag acctaggagc 1260
ccctctgacc actgaatccg tctccacacc ccttctgcca agggaagccc cttcaggaag 1320
gaccccccaa agctgagggg ctgaatgtag cctttttcaac agagaaggct cccacttgag 1380
agcagcctct acctgacccc ctggaccaca gagagccact ctgaccctca gccccctcgc 1440
ttcttcagct aaaactccaa aggtttggtt tcagatgggg tttgttttgt tctgtttggt 1500
tttggttttg tttggggtgg gtgggtcatt gcggtcttag attatgtttc tcttgctacc 1560
aaacagtcat gtattaactc tctttggatg atgaagttta aagagtcaat aaatagaaac 1620
accagatgac tgcaaaaaaa aaaaaaaaaa aaaaaaaana aaanaaaaaa aaaaanaaaa 1680
aaaaaaaaaa                                                         1690
```

<210> 114
<211> 620
<212> DNA
<213> Homo sapiens

<400> 114
ctctgggcct gggtctgggg gagagggttg ccagggagac tcagctctcc ttgggggctg 60
gccagctgac tgagggtaca caggattggg tctagacctt gatgcctggg tggagggccc 120
ttgtaagggg ccatagcctc ttcaggacca actggaggga gagttaggaa acaccagctc 180
ctgcctgggg cagtgaggga atgggagcag ctgtgggcgc ctcatttcag gcaagtcctc 240
cccaaacctt cagatgcagt gagacctggc cttcctgttg tgcttttcag actttgtttt 300
cagaatgctt ttatctcgag tgtgcccttc ggccctcaca agagcccctg gggagtaggt 360
ggtggcctgt gccgtcatcc ccatttcaaa gcagggagct gaggtcctgg gaggggaaag 420
tgcttgcctg aggtcccact gtgttagtgg gtgggcagga ctggaactcg gttctccaac 480
agcccagagc tcactctttt acacccagag gtggagcagg tggcttaggg ggtggttatg 540
tacttcacaa gccaattccc ttcagccagg agctcctggg tgcatttccg tgtcagaaac 600
agtaccgagt cccacccccct   620

<210> 115
<211> 542
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (511)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (521)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (535)
<223> n equals a,t,g, or c

<400> 115
tcgacccacg cgtccgcttc tcggcccctt gtagaacctc tgtcaggttc agcctactcg 60
cctctactcc agcctccact ccggcctcca ccatgtccgt caggtgaccc agaagtccta 120
caaggtgtcc acctccggcc cccgggcctt cagcagccgc tcctacacca gcgggcctgg 180
ctcccgcatc agctcgtccg ccttctcccg ggtgggcggc asttccgggg gggcctgaac 240
agcagcatga gtgtggtcgg gggctacggc ggcggggccg gggtatgggg ggcatcacgg 300
ccgtctcagt gaaccagagc ctgctgagcc cccttwaagc tggaatkgga tcccaacatc 360

89

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caagctgtgc gcaacccagg agaaggagca gntcaagacc ttcaacaaca anttggcttc 420
gttcatcgac aagtgaagca ctggagcagc agaacaaatt tttggagacc aattggagct 480
tcttaaagca gcagaagacg cgcggagaac ntagacaaat nttcgagagt aaatnagaac 540
tt                                                                542


<210> 116
<211> 525
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c

<400> 116
aattcaaccg tcgttatccc aaaattcagt tttcactttc caccggccct tccggcacta 60
tgctggatgg tgtactggag ggaaaactga atgcggcgtt tattgatgga cccattaacc 120
atactgccat cgacgggata ccggtatacc gcgaggaact gatgatcgtc acgccacaag 180
gatatgcgcc agtaacccgt gccagtcagg ttaatggcag taacatttat gccttccgcg 240
ccaattgttc gtatcgtcgc cacttcgaga gctggtttca tgctgacggt gccgctccgg 300
gaactatcca tgagatggag tcttatcacg gaatgttggc ctgtgtgatc gcaggagcag 360
gcattgcgct tattccgcgc tctatgctgg aaagtatgcc ggggcatcac cargttgaan 420
cgknggccgt tagctgagca atggcgttgg ttaacaacct ggctggtctg gccgtcgtgg 480
tgcgaaaaaa cgttccgctc gaagggggc ccggtancca attcg            525


<210> 117
<211> 728
<212> DNA
<213> Homo sapiens

<400> 117
aacgagcgcc tgctaggatc agcggtggtg gttccgcgat ggtaggcggc ggcggggtcg 60
gcggcggcct cctggagaat gccaacccc tcatctacca gcgctctggg gagcggcctg 120
tgacggcagg cgaggaggac gagcaggttc ccgacagcat cgacgcacgc gagatcttcg 180
atctgattcg ctccatcaat gacccggagc atccactgac gctagaggag ttgaacgtag 240
tagagcaggt gcgggttcag gttagcgacc ccgagagtac agtggctgtg gctttcacac 300
caaccattcc gcactgcagc atggccaccc ttattggtct gtccatcaag gtcaagcttc 360
tgcgctccct tcctcagcgt ttcaagatgg acgtgcacat tactccgggg acccatgcct 420
cagagcatgc agtgaacaag caacttgcag ataaggagcg ggtggcagct gccctggaga 480
acacccacct cttggaggtt gtgaatcagt gcctgtcagc ccgctcctga gcctggcctt 540
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90

```
tgacccctca gcctgcatac tggtatcctg gtcccagctc ctgccagggc tgttaccgtt 600
gttttcttga atcactcaca atgagaaact aacattttgc tttttgtaat aaagttaatt 660
tatattcarw tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acccggggggg 720
gggccccc                                                          728
```

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<210> 118
<211> 948
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (920)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (944)
<223> n equals a,t,g, or c

<400> 118
agaagtacgg acccctgaag cccctgccac agaccccgca cctggaggas gacttgaagg 60
aggtgctgcg ttctgaggct ggcatcgaac tcatcatcga ggacgacatc aggcccgaga 120
agcagaagag gaagcctggg ctgcggcgga gcccatcaag aaagtccgga agtctctggc 180
tcttgacatt gtggatgagg atgtgaagct gatgatgtcc acactgccca agtctctatc 240
cttgccgaca actgcccctt caaactcttc cagcctcacc ctgtcaggta tcaaagaaga 300
caacagcttg ctcaaccagg gcttcttgca ggccaagccc gagaaggcag cagtggccca 360
gaagccccga agccacttca cgacacctgc ccctatgtcc agtgcctgga agacggtggc 420
ctgcggggggg accagggacc agcttttcat gcaggagaaa gcccggcagc tcctgggccg 480
cctgaagccc agccacacat ctcggaccct catcttgtcc tgaggtgttg agggtgtcac 540
gagcccattc tcatgtttac aggggttgtg ggggcagagg gggtctgtga atctgagagt 600
cattcaggtg acctcctgca gggagccttc tgccaccagc ccctcccccag actctcaggt 660
ggagcaacag ggccatgtgc tgccctgttg ccgagcccag ctgtgggcgg ctcctggtgc 720
taacaacaaa gttccacttc caggtctgcc tggttccctc cccaaggcca cagggagctc 780
cgtcagcttc tcccaagccc acgtcaggcc tggcctcatc tcagaccctg cttaggatgg 840
gggatgtggc cagggggtgct cctgtgctca ccctctcttg gtgcatttttt ttggaagaat 900
aaaattgcct ctctctttgn aaaaaaaaaa aaaaaaaaaa gggnggcc              948
```

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<210> 119
<211> 211
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (125)
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<223> n equals a,t,g, or c

<400> 119
tcgacccacg cggtccgctt ggtggggtcg gctgctttct cgcgtttccc cccaaccccg 60
tccggcctcg cccagcgttt ccacgcggaa ccaactgcca gaggcgcggc gcggcgtcga 120
gcngngcgag tgtgaggaaa ccgccgcctc agccgagcgc gcgggcccgc ccagggcgtt 180
agttttcggc gcgcagtcgc ggtcccccgg c   211

<210> 120
<211> 1308
<212> DNA
<213> Homo sapiens

<400> 120
tcgacccacg cgtccggact gttctaagtg agttcgggtg ggggagcttc acgaggggag 60
gctgctctgt gaaggaaccg cctttctctc cgcgtgtctc acccttttct ccccatatct 120
gtttggacat gagctgaggg cacggtcgcg ggcggtcagc ctgttcgcag ctacggcgag 180
gaggggcgcg attgytcctt gttgccgctc cgcttagtgg ccgcgtccat tccgcgcggt 240
gtcccgattt taggggtagg gagaagtgtc agcttcaggc atcgcgaggc gtggcggccc 300
catggccccg ctgggaggcg ccccgcggct ggtactgctg ttcagcggca agaggaaatc 360
cgggaaggac ttcgtgaccg aggcgctgca gagcagactt ggagctgatg tctgtgctgt 420
cctccggctc tctggtccac tcaaggaaca gtatgctcag gagcatggct tgaacttcca 480
gagactcctg gacaccagca cctacaagga ggcctttcgg aaggacatga tccgctgggg 540
agaggagaaa cgccaggctg acccaggctt cttttgcagg aagattgtgg agggcatctc 600
ccagcccatc tggctggtga gtgacacacg gagagtgtct gacatccagt ggtttcggga 660
ggcctatggg gccgtgacgc agacggtccg cgttgtagcg ttggagcaga gccgacagca 720
gcggggctgg gtgttcacgc caggggtgga cgatgctgag tcagaatgtg gcctggacaa 780
cttcggggac tttgactggg tcatcgagaa ccatggagtt gaacagcgcc tggaggagca 840
gttggagaac ctgatagaat ttatccgctc cagactttag tcactaggtt ctaggagtga 900
gctggggcct gctgaggtgg gggtggggct gactctgcaa aatgggggtg tcccccgatc 960
ctggccgagg tgaggaacag acaggggggg tctagattct gaggggggttg gtggatattg 1020
ggcaaggcag gaaacctctg gagacctcat tttctccatg gggaagacag ccatgctctt 1080
caggaggaga ctccaagggc aaaggagggt gtcttggctg tgcttgaagg cgaaaccctg 1140
ccatatcccc agtgccagtc ccctcagcct gtggtggcct tgcatcctga ctggatgttc 1200
tcagcccctt gttctgggca agaacccaga gctccccagt gtggatacta ataaacctct 1260
tggagcacaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaagg   1308

<210> 121
<211> 2516
<212> DNA
<213> Homo sapiens

<400> 121
gattgacatt ccagtgaaat gatgggagtt aattgattta atttagatta gttgaaaatt 60
attacaaaat attctaaaag ggtttttttgt ggtacttcaa gaaacctgat tagttttgat 120
ctattgaaat cacaaaagta gaacagggcw ytttattttt gtataattta ggattaggta 180
tgcttctttg ttctaacaag tcatgttttc taacccttct ttcactaagc aaaccagaac 240
agatttgaac tgttatgggt tatatattag tatggagatc agctcagatg acattaaaaa 300
tgccgtagtg ttattcttgt atgccaaatc tttttttccc caaaattagc actttaattt 360
tatttactgt tataatattt gttttcttag attaggtagg aaatcttaat ttggccaccg 420
cctactttga caagtaaata ttacatcata cgattttgca acattaaatt agaacactag 480

92

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aaactaaaaa attatgtttc agtgaatgct acaactaagc attttttttt tttaagaaaa 540
acaattgtat tatgttttgt tgccttgcca ctttgagtat cttatctgaa aatctgttcc 600
ttgccatgtt tttctcctgt taacataaac tatgtgccct gtgaatttct ggggactgaa 660
tttgaaattg ctcctgccaa ccgtttgtgg cctggcgtgt atctgaatgc ctgaatatct 720
ccccgctgaa tgaatttcgt attctgccct gaattcactc gggtatattg attggctgga 780
tgatcttggt gccgcccact tgacgtttcc agaagagtca ccgaagaaaa gaaccaggag 840
tgtagaggat gatgaggagg gtcacctgat ctgtcagagt ggagacgtac taagtgcaag 900
atgtatagaa tattttcaa cacttattaa cttttcagat aacataatct atatatagat 960
taagctttca gggatttgga aatctttttt tctttctctt ttttgttttt gttttatttt 1020
tccatttctt ttggtggggg ggattgtatt tttgctttct ttagaaatgt aatgtttgtt 1080
atatagaact tccagaacag taatcaaatt aatgaaatta gacctaataa ttatgttttt 1140
tgatggtgtt gaccaataaa atatctagtg ataaggaaat ttgtagcatc aactagaata 1200
atctacattg atagcattta ttgtgataag tacattgttt ccacttcttg atatgactga 1260
gatttatttc tctctttag atgaaattgt tgatacttta ggtgaaggag cttttggaaa 1320
agttgtggag tgcatcgatc ataaagcggg aggtagacat gtagcagtaa aaatagttaa 1380
aaatgtggat agatactgtg aagctgctcg ctcagaaata caagttctgg aacatctgaa 1440
tacaacagac cccaacagta ctttccgctg tgtccagatg ttggaatggt ttgagcatca 1500
tggtcacatt tgcattgttt ttgaactatt gggacttagt acttacgact tcattaaaga 1560
aaatggtttt ctaccatttc gactggatca tatcagaaag atggcatatc agatatgcaa 1620
gtctgtgaat tttttgcaca gtaataagtt gactcacaca gacttaaagc ctgaaaacat 1680
cttatttgtg cagtctgact acacagaggc gtataatccc aaaataaaac gtgatgaacg 1740
caccttaata aatccagata ttaaagttgt agactttggt agtgcaacat atgatgacga 1800
acatcacagt acattggtat ctacaagaca ttatagagca cctgaagtta ttttagccct 1860
agggtggtcc caaccatgtg atgtctggag cataggatgc attcttattg aatactatct 1920
tgggtttacc gtatttccaa cacacgatag taaggagcat ttagcaatga tggaaaggat 1980
tcttggacct ctaccaaaac atatgataca gaaaaccagg aaacgtaaat attttcacca 2040
cgatcgatta gactgggatg aacacagttc tgccggcaga tatgtttcaa gacgctgtaa 2100
acctctgaag gaatttatgc tttctcaaga tgttgaacat gagcgtctct ttgacctcat 2160
tcagaaaatg ttggagtatg atccagccaa aagaattact ctcagagaag ccttaaagca 2220
tcctttcttt gaccttctga agaaaagtat atagatctgt aattggacag ctctctcgaa 2280
gagatcttac agactgtatc agtctaattt ttaaatttta agttattttg tacagctttg 2340
taaattctta acatttttat attgccatgt ttattttgtt tgggtaattt ggttcattaa 2400
gtacatagct aaggtaatga acatcttttt cagtaattgt aaagtgattt attcagaata 2460
aattttttgt gcttatgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg aggggg 2516
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<210> 122
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1053)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1124)
<223> n equals a,t,g, or c

<220>

93

<221> misc feature
<222> (1125)
<223> n equals a,t,g, or c

<400> 122
gtggcgcacg gggtgggagc ggacccaggc cgggagcagg cgccgccgcc agtgagaacc 60
ggggccggag ccgggtgcgg atttgctggg gctgagtcgg gggcgcgcgg gccctgacct 120
ctgccctctg acctctcccc tagcaggcga ccatgggggaa cgtgttggct gccagctcgc 180
cgcccgcagg gccgccaccg ccgcctgcgc cggccctcgt ggggctgccg ccacctccgc 240
cctcgccgcc gggcttcacg ctgccgccgc tgggaggcag cctgggcgcc ggcaccagta 300
cgaktcgarg ttcggaacgg acccccgggg ctgcaaccgc cagcgcctca ggggccgccg 360
aggatggggc ctgcggctgc ctgcccaacc cgggcacatt cgaggagtgc caccggaagt 420
gcaaggagct gtttcccatt cagatggagg gtgtcaagct cacagtcaac aaagggttga 480
gtaaccattt tcaggtcaac cacacagtag ccctcagcac aatcggggag tccaactacc 540
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tggtgggtga catggacaac agtggcagtc tcaacgctca ggtcattcac cagctgggcc 660
ccggtctcag gtccaagatg gccatccaga cccagcagtc gaagtttgtg aactggcagg 720
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tgcacgcaac atactaccac aaagccagtg accagctgca ggtgggtgtg gagtttgagg 1020
ccagcacaag gwtgcaggac accagcgtct ccnttsgggt accagcttgg aacttgccca 1080
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<210> 123
<211> 2114
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1966)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2039)
<223> n equals a,t,g, or c

<400> 123
accccgcgcg ccactcgctc gcgtcmgagg gaggagaaag tggcgagttc cggatccctg 60
cctagcgcgg cccaacctt actccagaga tcatggctgc cgaggatgtg gtggcgactg 120
gcgccgaccc aagcgatctg gagagcggcg ggctgctgca tgagattttc acgtcgccgc 180
tcaacctgct gctgcttggc ctctgcatct tcctgctcta caagatcgtg cgcggggacc 240
agccggcggc cagcggcgac agcgacgacg acgagccgcc ccctctgccc cgcctcaagc 300
ggcgcgactt cacccccgcc gagctgcggc gcttcgacgg cgtccaggac ccgcgcatac 360
tcatggccat caacggcaag gtgttcgatg tgaccaaagg ccgcaaattc tacgggcccg 420
aggggccgta tggggtcttt gctggaagag atgcatccag gggccttgcc acattttgcc 480
tggataagga agcactgaag gatgagtacg atgacctttc tgacctcact gctgcccagc 540
aggagactct gagtgactgg gagtctcagt tcactttcaa gtatcatcac gtgggcaaac 600

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gtgcccggaa aaatgattaa agcattcagt ggaagtatat ctattttgt attttgcaaa 720
atcatttgta acagtccact ctgtctttaa aacatagtga ttacaatatt tagaaagttt 780
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ttagaatgca tgatgtgttt gtgtgtcaca aatccagaaa gtgaactgca gtgctgtaat 900
acacatgtta atactgtttt tcttctatct gtagttagta caggatgaat ttaaatgtgt 960
ttttcctgag agacaaggaa gacttgggta tttcccaaaa caggtaaaaa tcttaaatgt 1020
gcaccaagag caaaggatca acttttagtc atgatgttct gtaaagacaa caaatccctt 1080
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aaacagagct cagctgcaaa aaagcatatt ttctgtgttt ctggactgca ctgttgtcct 1260
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tggtcagtta ataaaaatgg ttttacccac taaaaaaaaa aaaaaaaggg cggccgctct 1920
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tagtgagtcg tattataagc taggcactgg ccgtcgtttt acaacgtcgt gactgggana 2040
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aactacctac agag                                                  2114
```

<210> 124
<211> 583
<212> DNA
<213> Homo sapiens

<400> 124
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gcccggccta ttcccttggg cttttaaaaa gcgtcttgga tggaggtggt gcaggtgctc 60
accaagcccg cagtaaccca agttgcatgt atccccaggg cacttttgtg attccctgc 120
ttgtgactgc acaccgggac cccactcaat tcaaagaccc agactgcttc aaccctacca 180
acttcctgga caagggcaag ttccagggca atgatgcttt catgcccttt gcctcaggtg 240
caggcagagg aggaagggga ccagcctgga ctggctctgg ggtacctggt gctcactgtg 300
cacctgtgta cccggcaaag cagatgtgcc tggcacagg cctggcccac tcgggtatct 360
tcctattcct tacggccacc ttacagaggt tctgcctgct ccctgtggta cgccctggca 420
ccatcaacct cacctgcagt gcactggcct gggcagtgtc cccccagact tccagctcca 480
gccagtggcc tgctgaggtc aggctccact atggtgggct cactggccct caaacctcca 540
taccctccts ggtcaataaa ggccctaaat tgcaaaaaaa aaa                   583
```

<210> 125
<211> 1987
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature

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<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1960)
<223> n equals a,t,g, or c

<400> 125
cagtacngtc cgantcccgg gtcgacccac gcgtccgatg gcggcggagg aacctcagca 60
gcagaagcag gagccgctgg gcagcgactc cgaagtgtta actgtctggc ctatgatgaa 120
gccatcatgg ctcagcagga ccgaattcag caagagattg ctgtgcagaa ccctctggtg 180
tcagagcggc tggagctctc ggtcctatac aaggagtatg ctgaagatga caacatctat 240
caacagaaga tcaaggacct ccacaaaaag tactcgtaca tccgcaagac caggcctgac 300
ggcaactgtt tctatcgggc tttcggattc tcccacttgg aggcactgct ggatgacagc 360
aaggagttgc agcggtgaga agggtgggca ctgggcaccg aggcaggtgg gtgtytacct 420
cctccccggg cgagtaggat gtgtctcgag tagggtgtct ycctccttcc cgggcgatgg 480
gctggactct ggccttgcca rgcggggcag tgctgtntcg ccctggcgt ctgggctggt 540
cgaggagccc atgctgggcc cgcctttcca tcccaccccc aggttcaagg ctgtgtctgc 600
caagagcaag gaagacctgg tgtcccaggg cttcactgaa ttcacaattg aggatttcca 660
caacacgttc atggacctga ttgagcaggt ggagaagcag acctctgtcg ccgacctgct 720
ggcctccttc aatgaccaga gcacctccga ctaccttgtg gtctacctgc ggctgctcac 780
ctcgggctac ctgcagcgcg agagcaagtt cttcgagcac ttcatcgagg gtggacggac 840
tgtcaaggag ttctgccagc aggaggtgga gcccatgtgc aaggagagcg accacatcca 900
catcattgcg ctggcccagg ccctcagcgt gtccatccag gtggagtaca tggaccgcgg 960
cgagggcggc accaccaatc cgcacatctt ccctgagggc tccgagccca aggtctacct 1020
tctctaccgg cctggacact acgatatcct ctacaaatag ggctggctcc agcccgctgc 1080
tgccctgctg ccccccctctg ccaggcgcta gacatgtaca gaggtttttc tgtggttgta 1140
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ggggtgctgg tggtgagccg tgtgtgcgtg tccctgctct gctgcccgcc tggctgctct 1260
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tccccaacag gagcaggttt gaggggccag gcctcttgga ggcccctcct gcttcgttgg 1380
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cctccacgtc ccggctgggc cccagacccc agcttcctgc cctccaccgg gagtctgcat 1560
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ggagctgggc ctcccacagg gtgcccggggc agtgccatcc tggtggggga gggcagcctt 1680
caaacgtgtg gggtctamag tcctcaggtc taggcagggc tgccggttct ccacctcccc 1740
atccgcccca ggcccctgc ctgtgcctgc cttgcacccc ctctgcttgg ccacggtgt 1800
ctctgcattg cctgccttttt tgccttcacc tcttttcttc cccgcccct gcacattcgg 1860
gktctcagcc cccaggctgt gagctccttg gggcaggccc tcaataaatg tgaaactgct 1920
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gctgcaaaaa aaaaaaaaaa aaaaaaaggg ggccgcttan agatcctcaa gggccaagta 1980
cggtgat                                                            1987
```

<210> 126
<211> 1451
<212> DNA
<213> Homo sapiens

<400> 126
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gcccgtctgg taaacttgtc cagattgaat atgctttggc tgctgtagct ggaggagccc 120
cgtccgtggg aattaaagct gcaaatggtg tggtattagc aactgagaaa aaacagaaat 180
ccattctgta tgatgagcga agtgtacaca aagtagaacc aattaccaag catataggtt 240
tggtgtacag tggcatgggc cccgattaca gagtgcttgt gcacagagct cgaaaactag 300
ctcaacaata ctatcttgtg taccaagaac ccattcctac agctcagctg gtacagagag 360
tagcttctgt gatgcaagaa tatactcagt caggtggtgt tcgtccattt ggagtttctt 420
tacttatttg tggttggaat gagggacgac catatttatt tcagtcagat ccatctggag 480
cttactttgc ctggaaagct acagcaatgg gaaagaacta tgtgaatggg aagactttcc 540
ttgagaaaag atataatgaa gatctggaac ttgaagatgc cattcataca gccatcttaa 600
ccctaaagga aagctttgaa gggcaaatga cagaggataa catagaagtt ggaatctgca 660
atgaagctgg atttaggagg cttactccaa ctgaagttaa ggattacttg gctgccatag 720
cataacaatg aagtgactga aaaatccaga atttcagata atctatctac ttaaacatgt 780
ttaaagtatg ttttgttttg cagacttttt gcatacttat ttctacatgg tttaaatcga 840
ctgtttttaa aatgacactt ataaatccta ataaactgtt aaacccacct tccagccttt 900
taggagttgc taaaatttta acagttattt ccygcttttt atcacagttg atttctgaag 960
actayattgc caagcagaat gatgaaatga cttttcgtt gtcaggcaat tttggttaag 1020
tcaaatctta atgccctctt cgctatcaga tgttgcctgt gtttccataa agcaaaatgc 1080
tgattttggt aaaaaacatg actgcttcta gagctgggag gatctgcaga ctttcacgga 1140
ttcatggaac aagaaaagaa gcataggtac ttttaggtgc cattaggtat tgatcagtga 1200
aatcctaggg tgctctatga gattgtacta ggcctatgaa gagtggtaag ccaaataggt 1260
ctccatggga gatacattat gtaaataaat aaacaatggt ttgctggttc ctgttggtgt 1320
ctccacaagt aggtaaacat gtttaaagga acccgggttc ttagattttg ttagactttt 1380
taaactcaag gatgagcata agtgcttgaa ataaaatgct aatacttaag tgtcaaaaaa 1440
aaaaaaaaaa a                                                      1451
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<210> 127
<211> 1234
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (857)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1204)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (1226)
<223> n equals a,t,g, or c

<400> 127
aggttcccag ctagccagta aattctttaa agacaagcat tgtacccttt gcctcagtgt 60
gcccagcacc aacctggcac atgctctatt catgttttcc atgagtgttt catgttagag 120
gtgtattttg tacacaggtt ttatgctggg ggctcagaga gaagtggaca gcagattgtt 180
ggccctccca ggaagaaaag tcccaacgag ctggtgggat gatctcttta aaggtgccaa 240
agagcatgga gctgtagctg tggagcgagt gaccaagagc cctggagaga ccagtaaacc 300
gagaccattt gcaggaggtg gctaccgcct tggggcagca ccagaggaag agtctgccta 360
tgtggcagga gaaaagaggc agcattccag ccaagatgtt catgtagtat tgaaactctg 420
gaagagtgga ttcagcctgg ataatggaga actcagaagc taccaagacc catccaatgc 480
ccagtttctg gagtctatcc gcagagggga ggtgccagca gagcttcgga ggctagctca 540
cggtggacag gtgaacttgg atatggagga ccatcgggac gaggactttg tgaagcccaa 600
aggagccttc aaagccttca ctggcgaggg tcagaaactg ggcagcactg cccccaggtg 660
ttgagtacca gctctccagc ccaacaggca gaaaatgaag ccaaagccag ctcttccatc 720
ttaatcgacg aatcagagcc taccacaaac atccaaattc ggcttgcaga cggcgggagg 780
ctggtgcaga aatttaacca cagccacagg atcagcgaca tccgactctt catcgtggat 840
gcccggccag ccatggntgc caccagcttt atcctcatga ctactttccc gaacaaagag 900
ctggctgatg agagccagac cctgaaggaa gccaacctgc tcaatgctgt catcgtgcag 960
cggttaacat aaccgcccag ccagctgcct ggcctccctc ctgtgtttcc catggccagt 1020
ggccatgccc catggggatc gcccctcctg ccccttgtg cacacccagc agtccagtgc 1080
aacgtctcct ccatagctct gggttcttag atcttggttg gacgtttgtt ttctccttag 1140
ttgcatttcc tgggttttg tgatgatcaa tggactttaa tgaaaaaaaa aataaaaaca 1200
accnaaaggg gggcccggtc ccaatncccc cctt   1234

<210> 128
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (840)
<223> n equals a,t,g, or c

<400> 128
cccacgcgtc cgcaggcgcg ctcgggctgc cgctggctct tcgcacgcgg ccatggccga 60
ctccgagctg cagctggttg agcagcggat ccgcagcttc cccgacttcc ccaccccagg 120
cgtggtattc agggacatct cgcccgtcct gaaggacccc gcctccttcc gcgccgccat 180
cggcctcctg gcgcgacacc tgaaggcgac ccacggggggc cgcatcgact acatcgcagg 240
cctagactcc cgaggcttcc tctttggccc ctccctggcc caggagcttg gactgggctg 300
cgtgctcatc cgaaagcggg ggaagctgcc aggccccact ctgtgggcct cctattccct 360
ggagtacggg aaggctgagc tggagattca gaaagacgcc ctggagccag gacagagggt 420
ggtcgtcgtg gatgatctgc tggccactgg tggaaccatg aacgctgcct gtgagctgct 480
gggccgcctg cargctgagg tcctggagtg cgtgagcctg gtggagctga cctcgcttaa 540
gggcagggag aagctggcac ctgtaccctt cttctctctc ctgcagtatg agtgaccaca 600
gggcctccca gcccaacatc tccagctgga tcccagggaa atatcagcct tgggcaactg 660
cagtgaccag gggcaccggc tgcccacagg gaacacattc ctttgctggg gttcagcgcc 720
tctcctgggg ctggaagtgc caaagcctgg ggcaaagctg tgtttcagcc acactgaacc 780

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caattacaca cagcgggaga acgcagtaaa cagctttccc acaaaaaaaa aaaaaaaaan 840
aaaaaaaaaa aaaaagggcg gcc                                        863
```

<210> 129
<211> 1238
<212> DNA
<213> Homo sapiens

<400> 129
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cacagtgtct gctgtgattg agatgcgcac aggttggggg aggtagggcc ttacgcttgt 60
cctcagtggg ggcagtttgc cttagatgac arctgggctc ttcttcacac cacctgcagc 120
ccctccctgc ccctgcccta gctgctgtgt gttcagttgc cttctttcta cctcagccgg 180
cgtggagtgg tctctgtgca gttagtgcca ccccacacac ccgtctcttg attgagatgt 240
ttctggtggt tatgggtttc ccgtggagct kggggtgggc gccgtgtacc taagctggag 300
gctggcgctc tccctcagca caggtgggtc agtggccagc aggcccatct ggagtgggag 360
tgggcacttc caccccgccc acaggccatc cggctgtgca ggccagcccc taggagcarg 420
tcccgggtga ctggcagttt tcacggtcta gggccgagac gatggcatgg ggcctagagc 480
atgaggtaga gcagaatgca gaccacgccg ctggatgccg agagaccctg ctctccgagg 540
gaggcatctg tgtcatgctg tgagggctga ggacggggcc ctagtctctg gttttctggt 600
cttaacatcc ttatctgtgt ccgccacgga ggtgactgag ctgctagcga gttgtcctgt 660
cccaggtact tgagttttgg aaaagctgac tcacgcccat ccatctcaca gcccttccct 720
ggggacagtc gcttccgcct tgacacctca ctctcagttg aataactcaa gcttggtcat 780
cttcagactc gaattcttga gtagacccag acggcttagc ccaagtctag ttgcagctgc 840
ctcggcaagt ccccatttgc tcaggcagcc ctgaatgggc ctgtttacag gaatggtaaa 900
ttgggattgg aaggaatata gcttccagct tcataggcta gggtgaccac ggcttaggaa 960
acagggaaag aaagcaaggc ccttttcctg cctttccgg gatctgtcta ctccacctcc 1020
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tctgtcctgt tggctgcttg cttccagctc cccccaatct ccatcgcagc gggttcctcc 1140
tgtcttttct acagtgtcat aaaacatcct gcccctaccc tctcccaaag gtcaatttta 1200
attctyawca agaagattta tgaggagaag aaaaagaa                        1238
```

<210> 130
<211> 379
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c

<400> 130
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tggtttggga gctgccaggc tcctgggagg atcgcagtca gcagagcagg gctgaggcct 60
gggggtagga gcagagcctg cscatctgga ggcagcatgt ccaagaaagg gagtggaggt 120
gcagcraagg acccaggggc agagccacgc tggggatgga ccccttcgag gacacgctgc 180
ggyggctgcg tgaggccttc aactgakggc gcacgcggcc ggccgagttc cgggctgcgc 240
actccagggc ctgggccact tccttcaaga aaacaagcar cttctrcgmg acgtgctggc 300
ccaggaactg cataagccag ctttcgaagg cagacatatc tgagtcatcc tttgccagaa 360
cgaggttgaa tangctctt                                            379
```

<210> 131

99

<211> 1786
<212> DNA
<213> Homo sapiens

<400> 131
cctgggcgct aagatggcgg cggcgtgagt tgcatgttgt gtgaggatcc cggggccgcc 60
gcgtcgctcg ggccccgcca tggccgtcac catcacgctc aaaacgctgc agcagcagac 120
cttcaagatc cgcatggagc ctgacgagac ggtgaaggtg ctaaaggaga agatagaagc 180
tgagaagggt cgtgatgcct tccccgtggc tggacagaaa ctcatctatg ccggcaagat 240
cttgagtgac gatgtcccta tcagggacta tcgcatcgat gagaagaact ttgtggtcgt 300
catggtgacc aagaccaaag ccggccaggg tacctcagca cccccagagg cctcacccac 360
agctgcccca gagtcctcta catccttccc gcctgccccc acctcaggca tgtcccatcc 420
cccacctgcc gccagagagg acaagagccc atcagaggaa tccgccccca cgacgtcccc 480
agagtctgtg tcaggctctg ttccctcttc aggtagcagc gggcgagagg aagacgcggc 540
ctccacgcta gtgacgggct ctgagtatga gacgatgctg acggagatca tgtccatggg 600
ctatgagcga gagcgggtcg tggccgccct gagagccagc tacaacaacc cccaccgagc 660
cgtggagtat ctgctcacgg gaattcctgg gagccccgag ccggaacacg gttctgtcca 720
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gcgggaccag ccccagttcc agaacatgcg gcaggtgatt cagcagaacc ctgcgctgct 840
gcccgccctg ctccagcagc tgggccagga gaaccctcag cttttacagc aaatcagccg 900
gcaccaggag cagttcatcc agatgctgaa cgagcccect ggggagctgg cggacatctc 960
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ggtgacgccg caggagaaag aagctataga gaggttgaag gccctgggct tcccagagag 1080
cctggtcatc caggcctatt cgcgtgtga aaaaaatgag aacttggctg ccaacttcct 1140
cctgagtcag aactttgatg acgagtgatg ccaggaagcc aggccaccga gcccccacc 1200
ctacccttat tccatgaaag ttttataaaa gaaaaatat atatatattc atgtttattt 1260
aagaaatgga aaaaaaaatc aaaaatctta aaaaaacaag caaacagtcc agcttcctgt 1320
cctcctaaag tggcccctgt tcccatctcc cgggccagac agctgtcccc ccgtcctcct 1380
ccccagccca gcctgctcag agaagctggc aggactggga ggcgacagat gggcccctct 1440
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ccgaaaaacc cctgaggacc ccccccatc ctcttctagg atgaggggaa gctggagccc 1560
caactttgat cctccattgg agtggcccaa atctttccat ctagggcaag tcctgaaagc 1620
ccaaggcccc ctccccagtc tggccttgcc tccagcctgg agaagggcta acatcagctc 1680
attgtcaagg ccacccccac cccagaacag aaccgtgtct ctgataaagg ttttgaagtg 1740
aataaagttt taaaaactaa aaaaaaaaa aaaaaaaaa aaaaaa   1786

<210> 132
<211> 974
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (853)
<223> n equals a,t,g, or c

100

<220>
<221> misc feature
<222> (963)
<223> n equals a,t,g, or c

<400> 132
ggcagctaac ctcctcatcc ccgctgtggg ttctagcctc tctgaagccc tggacttgat 60
cgagtcggac cctgatgctt ggtgtgacct gagtaaattt gacctccctg aggaaccatc 120
tgcagaggac agtatcaaca acagcctagt gcagctgcaa gcgtncacat cagcagcaag 180
tcctgccacc ccgccagcct tccgccctgg tgcccagtgt gaccgagtac cgcctggatg 240
gccacaccat ctcagacctg agccggagca gccgggggcga gctgatcccc atctccccca 300
gcactgaagt cggggggctct ggcattggca caccgccctc tgtgctcaag cggcagagga 360
agaggcgtgt ggctctgtcc cctgtcactg agaatagcac cagtctgtcc ttcctggatt 420
cctgtaacag cctcacgccc aagagcacac ctgttaagac cctgcccttc tcgccctccc 480
agtttctgaa cttctggaac aaacaggaca cattggagct ggagagcccc tcgctgacat 540
ccaccccagt gtgcagccag aaggtggtgg tcaccacacc actgcaccgg acaagacac 600
ccctgcacca gaaacatgct gcgtttgtaa ccccagatca gaagtactcc atggacaaca 660
ctccccacac gccaacccccg ttcaagaacg ccctggagaa gtacggaccc ctgaagcccc 720
tgccacagac cccgcacctg gaggaggact tgaaggaggt gctgcgttct gaggctggca 780
tcgaactcat catcgaggac gacatcaggc ccgagaagca gaagaggaag cctgggctgc 840
ggcggagccc atncaagaaa gtccggaagt ctctggctct tgacattgtg gatgaggatg 900
tgaagytgat gatgtccaca ytgcccaakt ytttatcctt ggcgacaayt gccccttgca 960
aanttttcca gcct   974

<210> 133
<211> 634
<212> DNA
<213> Homo sapiens

<400> 133
attcggcacg acgggtgaac ctggccacag ctcaccctgg aacagccaca atgtctgccc 60
cttagagaag aaccctgaaa tcagaccagt ttttgcggcc tccccctttc ctctctgtta 120
cagtgccctt tccaggcctt aagagaagta aaacttagct gcagcgtcag gaggtggacc 180
ccagagtgtg agtggcacgc ttctctgtga acccgtcctc accatgtttg ccacatctgg 240
ggcagtggca gcggggaagc cttactcgtg cagcgaatgt ggcaagagct tctgctacag 300
ctcagtgctg ctgcgacatg aacgagctca cggcggtgac ggccgcttcc gttgcctaga 360
atgcggtgag cgctgtgcac gggctgctga cctccgagcg cacaggcgca cgcatgctgg 420
ccagaccctc tacatctgca gtgagtgcgg acaaagcttc cgccacagcg gccgtcttga 480
cctacacttg ggcgcacacc ggcagcgatg ccgcacttgc ccctgccgca cwtgcggccg 540
gcgcttcccg cacctcccgg cgctgctgct acaccggcgc cgccagcatc tgccagagcg 600
gccccgscgy tgcccgctgt gcgycctcag gttt   634

<210> 134
<211> 1855
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1818)
<223> n equals a,t,g, or c

```
<220>
<221> misc feature
<222> (1845)
<223> n equals a,t,g, or c

<400> 134
gcccacgcgt ccggcggcgc gcccgagggc gccgcgtgcg gcctgcagga gggcccgtgc  60
ggcgaggggc tgcagtgcgt ggtgcccttc ggggtgccag cctcggccac ggtgcggcgg 120
cgcgcgcagg ccggcctctg tgtgtgcgcc acagcgagcc ggtgtgcggc agcgacgcca 180
acacctacgc caacctgtgc cagctgcgcg ccgccagccg ccgctccgag aggctgcacc 240
ggccgccggt catcgtcctg cagcgcggag cctgcggcca agggcaggaa gatcccaaca 300
gtttgcgcca taaatataac tttatcgcgg acgtggtgga gaagatcgcc cctgccgtgg 360
ttcatatcga attgtttcgc aagcttccgt tttctaaacg agaggtgccg gtggctagtg 420
ggtctgggtt tattgtgtcg gaagatggac tgatcgtgac aaatgcccac gtggtgacca 480
acaagcaccg ggtcaaagtt gagctgaaga acggtgccac ttacgaagcc aaaatcaagg 540
atgtggatga gaaagcagac atcgcactca tcaaaattga ccaccagggc aagctgcctg 600
tcctgctgct tggccgctcc tcagagctgc ggccgggaga gttcgtggtc gccatcggaa 660
gcccgttttc ccttcaaaac acagtcacca ccgggatcgt gagcaccacc cagcgaggcg 720
gcaaagagct ggggctccgc aactcagaca tggactacat ccagaccgac gccatcatca 780
actatggaaa ctcgggaggc ccgttagtaa acctggacgg tgaagtgatt ggaattaaca 840
ctttgaaagt gacagctgga atctcctttg caatcccatc tgataagatt aaaaagttcc 900
tcacggagtc ccatgaccga caggccaaag gaaaagccat caccaagaag aagtatattg 960
gtatccgaat gatgtcactc acgtccagca aagccaaaga gctgaaggac cggcaccggg 1020
acttcccaga cgtgatctca ggagcgtata taattgaagt aattcctgat accccagcag 1080
aagctggtgg tctcaaggaa aacgacgtca taatcagcat caatggacag tccgtggtct 1140
ccgccaatga tgtcagcgac gtcattaaaa gggaaagcac cctgaacatg gtggtccgca 1200
gggtaatgaa gatatcatga tcacagtgat tcccgaagaa attgacccat aggcagaggc 1260
atgagctgga cttcatgttt ccctcaaaga ctctcccgtg gatgacggat gaggactctg 1320
ggctgctgga ataggacact caagactttt gactgccatt ttgtttgttc agtggagact 1380
ccctggccaa cagaatcctt cttgatagtt tgcaggcaaa acaaatgtaa tgttgcagat 1440
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cttgggccat tcttgcttag acagtcagca tttgtctcct cctttaactg agtcatcatc 1560
ttagtccaac taatgcagtc gatacaatgc gtagatagaa gaagccccac gggagccagg 1620
atgggactgg tcgtgtttgt gcttttctcc aagtcagcac ccaaaggtca atgcacagag 1680
accccgggtg ggtgagcgct ggcttctcaa acggccgaag ttgcctcttt taggaatctc 1740
tttggaattg ggagcacgat gactctgagt ttgagctatt aaagtacttc ttacacattg 1800
aaaaaaaaaa aaaaaaanct cgggggggg cccggtaccc aattngccct ttaag        1855

<210> 135
<211> 917
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (913)
<223> n equals a,t,g, or c

<400> 135
ggtttttgc gcgtgcatat ggcggtggcg ggtgggggga aggggggagat cctgctgcac  60
```

102

```
tggccgccca agttgggggg cgagctcggt ggtgacgcgc ggccctcacg tgacccarag 120
ctgcagagcg acgcagcctt cggtgcagtc gtcactcgcg tctggctacc agctccccgc 180
tgccctgagc tcggcgggct ggcattcggc ccggggaaaa gcggagcagg tctgcgaggc 240
taagtgtctc cgcggcgcac ctcgcggcga gaatccggag gagaaggaga ctgcaaggat 300
aggcccagga aaacgaagag atggagcagc ctatgcagaa tggagaggaa gaccgccctt 360
tgggaggagg tgaaggccac cagcctgcag gaaatcgacg gggacaggct cgccgacttg 420
cccctaattt tcgatgggcc atacccaata ggcagatcaa tgatgggatg ggtggagatg 480
gagatgatat ggaaatattc atggaggaga tgagagaaat cagaagaaaa cttagggagc 540
tgcagttgag gaattgtctg cgtatcctta tggggagct ctctaatcac catgaccatc 600
atgatgaatt ttgccttatg ccttgactcc tgccatttat catgagatta atactgtgat 660
tcccgctgtt ttcttttttcc ttgcattttc ctaatatgcc tttactgatc cgtttgctgt 720
gaaccctatg ttatttccat gtgtcaagtg ggtcttgtgt tgccagcttc tatttgaaga 780
ttgcctttgc actcagtgta agttctgtc agcagtagtt tcacccattt gcatggaaaa 840
atttaaagct aataaagcaa tttaaaaagc aaaaaaaaaa aaaaaaaaaa aaaaaamamg 900
gggggcccg gwnccca                                                917
```

<210> 136
<211> 1271
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1255)
<223> n equals a,t,g, or c

<400> 136
```
gcaaggcttc ccctctaccc tctctgggcc tctcacaaac gctgagcccc gccccgctga 60
ggcctgtctg cagaatccac ascaaccagc accatgccca tgayactggg gtactggrac 120
atccgcgggc tggcccaykc catccgcctg ctcctggaat acacagactc aagctaygag 180
gaaaagaagt acacgatggg ggacgctcct gattatgaca gaagccagtg gctgaatgaa 240
aaattcaagc tgggcctgga cttttcccaat ctgccctact tgattgatgg grctcacaag 300
atcacccaga gcaacgccat cctgcggtac attgcccgca gcacaacct gtgcggggaa 360
tcagaaaagg agcagattcg cgaagacatt ttggagaacc agtttatgga cagccgtatg 420
cagctggcca aactctgcta tgacccagat tttgagaaac tgaaaccaga atacctgcag 480
gcactcccctg aaatgctgaa gctctactca cagtttctgg ggaagcagcc atggtttctt 540
ggggacaaga tcacctttgt ggatttcatc gcttatgatg tccttgagag aaaccaagta 600
tttgagccca gctgcctgga tgccttccca aacctgaagg acttcatctc ccgatttgag 660
ggcttggaga agatctctgc ctacatgaag tccagccgct tcctcccaag acctgtgttc 720
acaaagatgg ctgtctgggg caacaagtag ggccttgaag gccaggaggt gggagtgagg 780
agcccatact cagcctgctg cccaggctgt gcagcgcagc tggactctgc atcccagcac 840
ctgcctcctc gttcctttct cctgtttatt cccatcttta ctcccaagac ttcattgtcc 900
ctcttcactc ccctaaacc cctgtcccat gcaggccctt tgaagcctca gctacccact 960
atccttcgtg aacatccccct cccatcatta cccttccctg cactaaagcc agcctgacct 1020
tccttcctgt tagtggttgt gtctgcttta aargcctgcc tggcccctcg cctgtggagc 1080
tcagccccga gctgtccccg tgttgcatga aggagcagca ttgactggtt tacaggccct 1140
```

103 .

```
gctcctgcag catggtccct gccttaggcc tacctgatgg aagtaaagcc tcaaccacaa 1200
aaaaaaaaaa aaaaaatttg gggggggggcc cgttanccca tttggcccctt taggngggggg 1260
ggttttaaat t                                                      1271
```

```
<210> 137
<211> 2017
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c

<400> 137
ggaatgtcat cagtgttgac ccgaatgatc agaaaaagac agcttgttat gacattgatg 60
ttgaagtgga tgacaccttg aagacccaga tgaattcttt tctgctgtcc actgccagcc 120
aacaggagat tgctactcta gacaacaaga caatgactga tgtggtgggt aaccararga 180
rgagcgccga gctgagttct acttccagcc ctgggkcagg aggctgtgtg ccratacttc 240
tactccaagg tgcagcagag acgacaagaa ttagagcaag ccctgggaat ccggnataca 300
tagggcctct cccacagccc tgattcgact gcaccaattc ttgawttggg ccctgtgctg 360
cctgcctcat agtatctgcc ttggtcttgc ttggggcgtt ccaggggatg ctgttggttc 420
aaggacaaca ccagaatgaa gagggtctca caagacacct gttatcctct tctttcaccc 480
tatctcttcc cacccccagc ttccctttgc cccacaaagt tcccatgtgc ctgtaccctc 540
ccctggtcta cataggacct ctagatagtg ttagagagag aacatgtagt ggtaatgagt 600
gcttggaatg gattgggcct caggccaggt ggtcttcaag gggaccagct aactgatcct 660
gcccttcaga gacccaggag ttgggagctt tcgctccttc tccaagactc aggcctgtgg 720
gcactctata agctagttga tcttggctct cctgataaca gaatccaatt tccttccttc 780
cctccacagg tttggaacaa actctccctt cacttgttgc cctgtagcac tacagaaacc 840
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ggggaactgt cattgccagc agaggctgtt ccttcctgct gtttggagat gtgactcatt 1140
cattcactca ctccaccctg cctctgcatc ccttaatgga gaaacgggcc taaaaccaaa 1200
cgggtaaaaa gccctgggcc atccctgtct tcctgtccct tgtctgccca gttgacacct 1260
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ccgagttagc atatcccagg ctcgcagact caacacagca agggtgggag acagctgggc 1560
acaaagggg aattccgttc agcatgggct ctaaacccac agaactgaca aagcccctgc 1620
ttccccaccc cctcctcagg ctcctgcgag cacacccca ccccaaatc cctccctgtt 1680
ctacactggg gacagcagaa tttttctcccc gtcttcccct tcctgccatt ttccctccct 1740
tgaaaggttg acactggaca accttgggggc agctgagccc tggccgcctc ctggctggaa 1800
ccatgagaag gaagctcagt acttcccaca gtgtccctgt tgataactgt ttttattaac 1860
tgaattgttt ttttcatgga ccaaactttt ttttgtactg tccccttatt gatgttaccc 1920
agttttaata aaagaatctt ctgaaggatg ggtcctccta cctactgtga gagagctctt 1980
ccctgagctc ttcttccttc aataccatta aaaaaaa                          2017
```

```
<210> 138
```

```
<211> 937
<212> DNA
<213> Homo sapiens

<400> 138
gattcaaaca ggcaacaatg accttttatt ttctgtttgt ccccacctcc ccagccttcc 60
acctcctgtt cttcctacct tcttcctttt tgactaaata atccccacct cccttgatca 120
tacagtgagg ctacagtgac tgaggggaga atccctcctg ttcactctcc caaccctgct 180
ccagcccctc agcttcccag accctcatgc agttggttgt aaattctccc aggagctgtt 240
ttactgtcta cttttcagga ttaaaaaaaa aatcaaaact taaaaaaaaa aaagtttaaa 300
aagcaaaatg gggaggggga ggaagcagtg actttttttt ggtaattatg cgcttttttt 360
taatttttag aatttgtctt tttactgtgg gtgggctgtt gatatttcat caagataagc 420
atttctttcc tgagttcagg tgactgagga agagccacaa aacaaaacac aacaaaacca 480
aaccacagaa tcatctttaa cccaactttt tatacgatgc cccagttccc cataactttg 540
cacacaagct tctgtgttca gttgaattgt aactgctttt tgtatttgga gagagtgact 600
attgaacttg aaacctttta ttccgggcgt cttggtagtt tctggtggga ttcagtgggt 660
gagagggaag aaggggaggt tggggggctc cttcccttca gaacttgaag tttctcccac 720
tgcctcctct ccagtggtct cccaggtgcc agacccaaaa gcttttccta cagtgatacc 780
ctttattttt acttcccctt gactcatatg ttttaacatg attttaacaa actgcactta 840
ttaagaaatg tgtttgccct gttttgtttg gtttcgtttt gttttctttg aataaatgac 900
atggcacctc ctagcaggaa ggaaaaaaaa aaaaaaa                          937

<210> 139
<211> 2759
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1654)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2743)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2744)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2746)
<223> n equals a,t,g, or c
```

105

```
<400> 139
gctagtctca caggaaccca ggcgttgccc ccactcttct ccctcggcta ccaccagagc 60
cgttggaact accgggacga ggctgatgtg ctggaagtgg atcagggctt tgatgatcac 120
aacctgccct gtgatgtcat ctggctagac attgaacatg ctgatggcaa ncggtatttc 180
acctgggacc ccagtcgctt ccctcagccc ygcaccatgc ttgascgctt ggcttctaag 240
aggcsraagc tggtggccat cgtagacccc cacatcaagg tggactccgg ctaccgagtt 300
cacgaggagc tgcggaacct ggggctgtat gtwaaaaccc gggatggctc tractatrag 360
ggctggtgct ggccaggctc agctggttac cctgacttca ctaatcccac gatgagggcc 420
tggtgggcta acatgttcag ctatgacaat tatgagggct cagctcccaa cctctttgtc 480
tggaatgaca tgaacgaacc atctgtgttc aatggtcctg aggtcaccat gctcaaggat 540
gcccagcatt atgggggctg ggagcaccgg gatgtgcata acatctatgg cctttatgtg 600
cacatggcga ctgctgatgg gctgagacag cgctctgggg gcatggaacg cccctttgtc 660
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actgccgagt gggaccattt gaagatctct attcctatgt gtctcagctt ggggctggtg 780
ggactttcct tctgtggggc ggatgtgggt ggcttcttca aaaacccaga gccagagctg 840
cttgtgcgct ggtaccagat gggtgcttac cagccattct tccgggcaca tgcccacttg 900
gacactgggc gacgagagcc atggctgtta ccatctcagc acaatgatat aatccgagat 960
gccttgggcc agcgatattc tttgctgccc ttctggtaca ccctcttata tcaggcccat 1020
cgggaaggca ttcctgtcat gaggcccctg tgggtgcagt accctcagga tgtgactacc 1080
ttcaatatag atgatcagta cttgcttggg gatgcgttgc tggttcaccc tgtatcagac 1140
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caaagctacc agaagcatca tggtccccag accctgtacc tgcctgtaac tctaagcagt 1260
atccctgtgt tccagcgtgg agggacaatc gtgcctcgat ggatgcgagt gcggcggtct 1320
tcagaatgta tgaaggatga ccccatcact ctctttgttg cacttagccc tcagggtaca 1380
gctcaaggag agctctttct ggatgatggg cacacgttca actatcagac tcgccaagag 1440
ttcctgctgc gtcgattctc attctctggc aacacccttg tctccagctc agcagaccct 1500
gaaggacact tgagacacc aatctggatt gagcgggtgg tgataatagg ggctggaaag 1560
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gaccctgaga cctctgtgtt ggtcctgcgc aagnctggca tcaatgtggc atctgattgg 1680
agtattcacc tgcgataacc caagggatgt tctgggttag ggggagggaa ggggagcatt 1740
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gctagtctaa gacccagatt ctgccaacat ttgggcagga tgagagggct gaccctgggc 1860
tccaaattcc tcttgtgatc tcctcacctc tcccactcca ttgataccaa ctctttccct 1920
tcattccccc aacatcctgt tgctctaact ggagcacatt cacttacgaa caccaggaaa 1980
ccacagggcc cttgtcgccc cttctctttc ccttatttag gagccctgaa ctcccccaga 2040
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gagttagggc tccttttccc cttccctccc accagattgc tctcccacct ttcatttctt 2160
cctccaggct ttactcccct ttttatgccc caccgataca ctgggaccac cccttacccc 2220
ggacaggatg aatggatcaa aggagtgagg ttgctaaaga acatcctttt ccctctcatt 2280
ctaccctttt cctctccccg attccttgta gagctgctgc aattcttaga ggggcagttc 2340
tacctcctct gtccctcggc agaaagacgt ttccacacct cttaggggat gcgcattaaa 2400
cttcttttgc cccttcttg tcccctttga ggggcactta agatggagaa atcagttgtg 2460
gtttcagtga atcatggtca cctgtattta ttgctaggag aagcctgagg gtggggggag 2520
atgatcatgt gtgctcgggg ttggctggaa gccctgggtg ggggttgggg ggaggactaa 2580
tggggagtcg gggaatattt gtgggtattt tttttacttc ctcttggttc ccagctgtga 2640
cacgttttga tcaaaggaga aacaataaag ggataaacca taaaaaaaaa aaaaaaaaaa 2700
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aannnanaaaa aaaaataaa 2759

<210> 140
<211> 1241
```

106

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c

<400> 140
tcgacccacg cgtccgggag aacgggcgga gggcgcgggc cgaccgggcg caccgaccat 60
ggcctccaaa tgccccaagt gcgacaagac cgtgtacttc gccgagaagg tgagctccct 120
ggggaaggac tggcacaagt tctgcctcaa gtgcgagcgc tgcagcaaga cgctgacgcc 180
cggggggccac gccgagcatg acgggaagcc gttctgccac aagccgtgct acgccaccct 240
gttcggaccc aaaggcgtga acatcggggg cgcgggctcc tacatctacg agaagcccct 300
ggcggagggg ccgcagntca ccggccccat cgaggtcccc gcggcccgag cagaggagcg 360
gaaggcgagc ggcccccccga aggscccagc agagcctcca gtgtcaccac tttcaccggg 420
gagcccaaca cgtgcccgcg ctgcagcaag aaggtgtact tcgctgagaa ggtgacgtct 480
ctgggcaagg attggcaccg gccctgcctg cgctgcgagc gctgcgggaa gacactgacc 540
cccggcgggc acgcggagca cgacggccag ccctactgcc acaagccctg ctatggaatc 600
ctcttcggac ccaagggagt gaacaccggt gcggtgggca gctacatcta tgaccgggac 660
cccgaaggca aggtccagcc ctaggctaca gcggctctca tgatgtgggc tcacctgcgc 720
cccagaccct gcaggggccc ccctgcttgg ctctgctggg agagtgctca gccgcccagt 780
cctgcctgca agcccagggc gagtattgga ggaggggcag ccacgggcag agcaccatgc 840
ccatccccga gtctctggtg tgtctgcccc ctctggcatc ctctgggcgt cccatgatcc 900
cttctgtgtc tgcgtgtccg aatccccgtg tgacctgtc ccagcatttt cccgccgacc 960
ctgcgtgtcc ccgtggcgct gtccgctctc cctctcctgc tgcccaccca cctgccagtg 1020
ttatttatgc tcccttcgtg ggtgatggcc acgccctcac catgtccctg gcagagggct 1080
tcctccggga tcccctgcct ggtgcccaca ctgcctcgca agcgctcgcc accctcacgt 1140
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa g                   1241

<210> 141
<211> 3405
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1569)
<223> n equals a,t,g, or c

<400> 141
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tcaggagcca ggcctctctc tcatcagcca ggccccgagg ctcctgccct cccaaagaca 180
gctgctcagc tcaagaaaga ggcaaagaaa cgggagaagc tagagaaatt ccaacagaag 240
cagaagatcc aacagcagca gccaccctyca ggggagaaga aaccaaaacc agagaagagg 300
gagaaacggg rtyctggggt cattamctwt gacytcccaa ccccamccgg ggaaaagaaa 360
gatgtcagtg gccccatgcc cgactcctac agccctcggt atgtggaggc tgcctggtac 420
ccttggtggg agcagcaggg cttcttcaag ccagagtatg ggcgtcctaa tgtgtcagca 480
gcaaatcccc gaggtgtctt catgatgtgc atcccacccc ccaatgtrac aggctccctg 540
```

107

```
cacctgggmc atgcactcac caacgccatc caggactccc tgactcgatg gcaccgcatg 600
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gtggtggaga agaagctatg gcgtgagmag ggactgagcc ggcaccagct gggccgcgag 720
gctttctaca ggaagtctgg aagtggaagg aggagaaagg tgaccggatt taccaccagt 780
tgaagaagct tggcagctcc ttggactggg atcgagcctg tttcaccatg gaccctaaac 840
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<210> 142
<211> 2268

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<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2169)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2196)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2232)
<223> n equals a,t,g, or c

<400> 142
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gagaaccata tccaggtccc aaggtcttcc cttgaagcca ctggcgccca ggagcggtgg  120
gccgaagacg tgccctaccc taccacaagg gctgtgtctc taccccctag cctgggcgtt  180
ggatctactg gaatgagcag cagccgcttc ctcggcagcc ttgggaagca cgggcgactg  240
gacagcagcc gccgggcacg gttatggggg cggggtgggc ggggaggcta gattgtttcc  300
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tactaagtgg ttttcttgct cccactccct accccttagt taaataggt ttattttcca  480
ctcatgccct tatgcctttt tttcttatag tttttttaact tattgactgt gcatgaccca  540
gtggtttgaa ttgttttttag ttcaagtcat tggtaaaaac taggtttaag gagatgagct  600
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cctccctttg cccagtagcc acatctggtt tactcaggca gcatctacta agaaattcag  780
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aaaacacaaa aagatattcc acaggacatg ccactttatt ataaaacctg acacaggcat 1860
agtaccaagt atttcctgca ttgttgctaa aattgtttta ttgtagctcc acattctggt 1920
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tgtagcaaaa agttgattag cttaccaaga ttattaatag caatgtatgt gttataatac 2160
aacttagtna cattaaagcc tacgaaaact catccnggct gtaggatagt aataaaggaa 2220
gaattatgac tncattatga aaaaaagaag ttttaaagtt ttcaatac               2268
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<210> 143
<211> 1757
<212> DNA
<213> Homo sapiens

<400> 143
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attttcacac acagtgctga agatgctgca agaccaaatc atagctcata aaatcaggtc 180
ctgagatagt tacccataaa gaggaatcct ttgagtgtat gccattggtg agccgatgag 240
catggaccat agaagggctc aatgtagaag gtaaaattgg caaatcataa ttgagaaata 300
tgaaatgtat tcccatacat aatatggtat agggtgtaat gtacctgctt ttgatcactt 360
ttcattttaa agtgctattc acttgatctt aaatgttcca tgaactgtta aatttcttaa 420
gttacatagt tactacacca catttatgtg tatgttatgt tttaatagtc aatgataggt 480
atgtacaatt gataatataa agggggctcat tgaaacttga gagcctgttg agttttggtt 540
agttgtagat tgcattttta taaaaaaaaa tacagataga ttgatgataa tagatattgg 600
ggcattgttt ctgtctcatg agaattcttt tattcattac cataagcctt cactgatact 660
ataagcatta ttttaaatga cgctgatctt aagtctgaaa taaatggaaa gcagaaaagg 720
tgagccagtt gatttgaatg cattggatat tagtgttaga aacaatgtat agtttagatt 780
gaaactgaac tgacttattt agcacttaaa caaaaatttg acaatgtttt tagttttttt 840
taagacagct tagtgtggtg atacttagaa ttctatggtt tgatgtttct tttagaaatg 900
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gccacaatat aagcttttga gggatttttt taaattggtg cttttaataa gcaaataaat 1380
cccagggttt tattttcttc agtgataccc ctatagaaac tcttaaatgt atttgcgcat 1440
atatatatat atattttctt atgcatgctc gatgcatttt cgtcctgaga aaaatgttct 1500
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cagtgtctta gggagatgca gcttggactt gaggtaaatt gaatacttta caactgtggt 1620
ttagagtttg ctttaatgac attgtatgta aaaggtcaca tgattgctgt aattttgtat 1680
tcattatggt ttcctcaata aatgtacatt gatgactatt aaaaaaaaaa aaaaaaaaa 1740
aaaaaaaaaa aaaatt                                                  1757
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<210> 144
<211> 1062
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
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<222> (52)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1056)
<223> n equals a,t,g, or c

<400> 144
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gtggcaactg gctgggaatg gctgaggggc tacctactgc ttgcggcctg ccagcgggag 120
gagggggggcg gaaagaagaa aggggggcggg gttgaggggg gcgggcctgg acctggggag 180
tgaaagcgaa agcccgggcg actagccggg agaccagaga tctagcgact gaagcagcat 240
ggccaagccg tgtggggtgc gcctgagcgg ggaagcccgc aaacaggtgg aggtcttcag 300
rcagaatctt ttccaggagg ctgaggaatt cctctacaga ttcttgccac agaaaatcat 360
atacctgaat cagctcttgc aagaggactc cctcaatgtg gctgacttga cttccctccg 420
ggccccactg gacatcccca tcccagaccc tccacccaag gatgatgaga tggaaacaga 480
taagcaggag aagaaagaag tccctaagtg tggatttctc cctgggaatg agaaagtcct 540
gtccctgctt gccctggtta agccagaagt ctggactctc aaagagaaat gcattctggt 600
gattacatgg atccaacacc tgatccccaa gattgaagat ggaaatgatt ttggggtagc 660
aatccaggag aaggtgctgg agagggtgaa tgccgtcaag accaaagtgg aagctttcca 720
gacaaccatt tccaagtact tctcagaacg tggggatgct gtggccaagg cctccaagga 780
gactcatgta atggattacc gggccttggt gcatgagcga gatgaggcag cctatgggga 840
gctcagggcc atggtgctgg acctgagggc cttctatgct gagctttatc atatcatcag 900
cagcaacctg gagaaaattg tcaacccaaa gggtgaagaa aagccatcta tgtactgaac 960
ccgggactag aaggaaaata aatgatctat atgttgtgtg gaaaaaaaaa aaaaaaaaa 1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaanaaaa aa                    1062
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<210> 145
<211> 1030
<212> DNA
<213> Homo sapiens

<400> 145
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gcggtcctgg acttggcccc agacagccgg cagggtcgtg gccagaacgc cggccgggac 120
catctgcaca ggcgctcgac agctccaaga cgctgcggcc aagcagaaag ttgaacagaa 180
cgcggctccc agccacacca agttcagcat ttaccctccc attccaggag aggagagctc 240
tctgaggtgg gcaggaaaga aatttgagga gatcccaatt gcacacatta aagcatccca 300
caacaacaca cagatccagg tagtctctgc tagtaatgag cccccttgcct ttgcttcctg 360
tggcacagag ggatttcgga atgccaagaa gggcacaggc atcgcagcac agacagcagg 420
catagccgca gcggcgagag ytaaacaaaa gggcgtgatc cacatccgag ttgtggtgaa 480
aggcctgggg ccaggacgct tgtctgccat gcacggactg atcatgggcg gcctggaagt 540
gatctcaatc acagacaaca ccccaatccc acacaacggc tgccgcccca ggaaggctcg 600
gaagctgtga tgggaaggag gcctgcactt ggacctgacc tcaagcctca gctccagtgg 660
gaccttgtaa aatgctccct gtcagagctc tccagaatat gcttgttgga gatccttcag 720
gcagtaaggg agagttttgc ctccttacac agtggccttt gcttgcacct ccagctggag 780
atgggtgtgc cccagaagta agctttgcat ctcttacaag aggggagcta cagggcagc 840
cgtgcctagg cccaaactct gctctgagaa aataaatatc tgtaccacct gtcataattt 900
tgagattttt tgctttcaga gttacgtaat tcctaattcc tcttgaaaaa gagagtgtga 960
aatgaggtga ggcctcagat gaaagtaaaa tataaatgtg agttgctatt taccagaaaa 1020
```

```
aaaaaaaaaa                                                          1030

<210> 146
<211> 814
<212> DNA
<213> Homo sapiens

<400> 146
ggcacaggcc aggtcgtgcc agcatccgcc ggacgccgga agtggttctc cgcccctgcc 60
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catggaggcc gtgctgaacg agctggtgtc tgtggaggac ctgctgaagt ttgaaaagaa 180
atttcagtct gagaaggcag caggctcggt gtccaagagc acgcagtttg agtacgcctg 240
gtgcctggtg cggacaagta caatgatgac atccgtaaag gcatcgtgct gctcgaggag 300
ctgctgccca aagggagcaa ggaggaacag cgggattacg tcttctacct ggccgtgggg 360
aactaccggc tcaaggaata cgagaaggcc ttaaagtacg tccgcgggtt gctgcagaca 420
gagccccaga acaaccaggc caaggaactg gagcggctca ttgacaaggc catgaagaaa 480
gatggactcg tgggcatggc catcgtggga ggcatggccc tgggtgtggc gggactggcc 540
ggactcatcg gacttgctgt gtccaagtcc aaatcctgaa ggagacgcgg gagcccacgg 600
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ccgtctctat cctctgtggc cttcagctaa tttctgctcc cctgagattc gtccttcagc 720
cccatcatgt gctttgggat gagtgtaaat aaaacggggc tgtggcttgg gaaaaaaaa 780
aaaaaaaaaa aaaaaaaaaa aaaaagggg gggg                                814

<210> 147
<211> 2678
<212> DNA
<213> Homo sapiens

<400> 147
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gaagggctaa tgaaccatag aagcgaggaa gaacgtgtaa ccgaaacaca gaaaaatgag 120
cgtgttaaga agcaacttca ggcattaagt tcagaattag cccaagccag agatgaaacc 180
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gcaggccttt gcagatatga tggaatgcat cccaccttgc caaagcactt acaccagttt 420
gactgtgcta gctaaaagac aaatttaagg ggagctcttc aacattaagg cagtatgata 480
tcatgcttgg ttttcttttt tcttttggtc cagggaatgg agaatggtgt tccattgcct 540
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cgtctgacaa atgtgtatgt gtggtttcag ttctgtgtac attttaaagg ataatggtga 660
acattttaat gggtttccct tgccctttcc atatttaacc tatttccaca ttctctctca 720
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tcatacagat caggcagtgt ttaaaatgat ggtaggtagc acagtggaca gtctttgatc 840
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agctggtgct tagtttttttt ttaatctaaa tttaattacc ttattggata tttgatattt 960
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atccattttt aaggstgtgt gaattttttct aaacaagaac catttgcaat atggatttct 2520
tagagattaa accaattata acttattagc agtsgcgagc acatgttcat atagtcaatg 2580
taaaaataca ctaatgagta tttggtaaat cccagtaggc ttttaccatt agcataattt 2640
tgtgttgtac ctcggccgcg accacgctaa gccgaatt                          2678
```

```
<210> 148
<211> 1028
<212> DNA
<213> Homo sapiens

<400> 148
ctgcctcagc ctcccgagta gctgggatta caggcacaca ccaccacgcc cggctaattt 60
tttgtgtctt tttagtagag acggggtttc gctatgttgg ccagactggt cttgaactgc 120
tgacctcgtg atccgcccgc ctcggcctct caaagtgctg ggattctgtg tgttttgtgc 180
acctccactt taggtaatca tagggagcac atttacagga tggtctaata acatgaaaac 240
aggctagttt caagcaacag caatgtcggt tggaaagcag gcgtcatttg ccttgaaaaa 300
agccttttga caacatacag gcattctttt aaaaccaggc tgaaacattt tatttccgag 360
acttaacgtt gtgtttcctg tttcttaaac ctagcacctc tgtgtatttg aaaataatga 420
gacatctttc attggatttt ggaaaattgt tccccatggg attctaacct cactaccaaa 480
tgagtgaaag cttgattaag agttcttcca tatactagcc tccttggaag aagtgatcag 540
aaggtgataa gaaggacaga aaggactatt ttaaagttgg actgaaggag aaaaaagcaa 600
aattcttgtt tcatcccaat tctagttaga acaaagttaa accccgtaa tcttaaagag 660
aaaatctttg gaggttttaa ttaaacattt tatacattta aagtcttgtt aatggtgctt 720
taagtgtcaa tgtagcatgt aaaaggcttt gtacagacag gtaaaagttc catttctgag 780
tgatgaaatg taacacttct tcatctttaa cttgaaatca aaactatcag attttatttt 840
tgtataattt aaggaaggta aagttagggg actagaagac tctaaattgg cttctacaga 900
tcaataattt aaatgtaact agttgggatt ttatagttaa aattatattt gtgtatataa 960
cataactaat ctgtaaattg taataaatat atttgcaatt attaaatgtt aagtgatatt 1020
ttggttca                                                           1028
```

```
<210> 149
<211> 1425
```

113

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (647)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1359)
<223> n equals a,t,g, or c

<400> 149
gcgtctccgg aagtggaggc gggagcggca cggcagccac tgcttggggt agcgggaggg 60
cagactctgg gcgccactcc cgggccggtc atgaacgggc cggcggacgg cgaagtggac 120
tacaaaaaaa aataccggaa tctgaagcgg aagctcaagt tcctcatcta cgagcacgag 180
tgcttccagg aggagctgag gaaagcgcaa aggaaattac tgaaggtgtc ccgggacaag 240
agtttcctcc tagaccgact tctgcagtac gagaacgtgg atgaagactc ttcggactca 300
gatgccactg catcatcaga taacagcgag acggagggga cacccaagtt gtctgacaca 360
ccggccccta agaggaagag aagccctccg ctggggggcg cccctctcc ctccagcctc 420
tccctgcctc cttcaacagg gtttcccctt caggcctccg gggtcccctc cccatacctg 480
agctcgctgg cctcctcccg ctacccccca ttcccttctg actacctggc cctgcagctg 540
cccgasccca gtcccctrag gcccaagcgg gagaaacggc cccgmctgcc ccggaaactc 600
aagatggcgg tgggacccc cgaytgccct gtgggagggc cgctganctt ccctggccgg 660
ggttytgggg stggggtcgg gamaaccctg amccccttc caccccctaa gatgcccccc 720
cccacgatcc tgagcacggt ccctcggcag atgttcagcg atgcaggtag cggggacgat 780
gccttggatg gagacgatga cctggtgatc gacatcccgg agtgaccgtg acatcacgcc 840
atgcccacca cggccccgcc cggcgccctc cccgtgccag cacacacgag tccagcttcc 900
tcggaggtgt ttattgatgc ccagctgcca tgctccggcc actgacacaa ccagaaaagg 960
cgtaaacatg cacgggtgtc ccccaggagg gtgcaggggc cctgccttca aaccccgggc 1020
ccctccaggg gacagttatt taaacgagtg gccgggagca tctgccacct gctggggagg 1080
cagagaccct gcaatggcca cctctttaaa agggcagctg tacagggcta ggttttttca 1140
atgaagtttc tgtattaaag gagtggctct gggtttgttt tttgtccttt ttttttgaga 1200
cattctcctc ctctgaacct cccctaatcc gacctcctcc ctgttggggg agagggacgg 1260
ggcagcgtgg agaggcagga gtgaggagcg cgggggcctg gggccgggct ctgagcactg 1320
cccgggtgtg cagatgatgg ggggtttgca tatttgcang ggactagcga gtcaggcagg 1380
aggtttgcat atgtgaatat agaactccgc agcccctcat gagca                1425

<210> 150
<211> 780
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c

<400> 150
gctgcgagaa gacgacagaa ggggagagcc aatggaaagg ggctgccgcg cggccgtaaa 60
```

114

```
gagtttgtag agcagttcgg gtgcggtacg ttgcattccg gtaccggacg ccgagagcgg 120
tttgtctccg tctctggagt tgtaggcgag aggtgatcat gtccggtcgc gggaaacagg 180
gcggcaaagt gcgagcaaag gccaaatccc gctcctcccg cgcgggcctg cagttcccgg 240
tgggccgagt gcacagactg ctgcgcaaag ggaactacgc ggasnagtgg gcgccggggc 300
gccggtgtac ctggcggcgg tgttggagta ccttacggcg gagatcctgg agctggctgg 360
caacgccgcg cgtgacaaca agaagaccag gataattccc cgccacctgc agctcgccat 420
ccgcaacgac gaggagttaa acaagctgct gggcaaagtg accatcgctc agggcggcgt 480
cctgcccaac atccaggccg tgctgctgcc caagaagacg gagagtcaga agacgaagag 540
caaatgaccc tgacgccgcc ctcagggagc tggctccscc agcaaaggcc cttttcatgg 600
tcgtcccgca atgcttttga atgtgctgga tgtcatggag ggccggtgac atctagcggg 660
gaggtgggcg gcgagggtcc cggcgggagc caataaagtt ggtgaaaatc gtaaaaaaaa 720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
```

<210> 151
<211> 1066
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1061)
<223> n equals a,t,g, or c

<400> 151
```
ggacccgcca tggcgcggaa gaaggtgcgt ccgcggctga tcgcggagct ggcccgccgc 60
gtgcgcgccc tgcgggagca actgaacagg ccgcgcgact cccagctcta cgcggtggac 120
tacgagacct tgacgcggcc gttctctgga cgccggctgc cggtccgggc ctgggccgac 180
gtgcgccgcg agagccgcct cttgcagctg ctcggccgcc tcccgctctt cggcctgggc 240
cgcctggtca cgcgcaagtc ctggctgtgg cagcacgacg agccgtgcta ctggcgcctc 300
acgcgggtgc ggcccgacta cacggcgcag aacttggacc acgggaaggc ctggggcatc 360
ctgaccttca aagacgcctc ttttttcttca tcagggaaga ctgagagcga aggcgcggga 420
gatcgaacac gtcatgtacc atgactggcg gctggtgccc aagcacgagg aggaggcctt 480
caccgcgttc acgccggcgc cggaagacag cctggcctcc gtgccgtacc cgcctctcct 540
ccgggccatg attatcgcag aacgacagaa aaatggagac acaagcaccg aggagcccat 600
gctgaatgtg cagaggatac gcatggaacc ctgggattac cctgcaaaac aggaagacaa 660
aggaagggcc aagggcaccc ccgtctagaa tgccagaacc agcgggtggc cttaggggct 720
gtgaggcagt ggggacctta ttgatgaaag aaaccgtctt tgcgttacac ccgagtctgc 780
ctctcggagc agggagctca ccttccgcga cgtgttctga gggtctgcat cttaggggg 840
agggctgggg caaatcgcca cctgtgcctt tcctctggcc ctgctgcccc cacacccaac 900
tccgagggcc cacgctgggg aaagcgggaa gcgctcgctc cctttcccccc attagtgctc 960
tctctgcctg gatcccggca gaagctatga aagggaataa agagaaaaga artamaaaaa 1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ncccct         1066
```

<210> 152
<211> 1649
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1543)

115

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1579)
<223> n equals a,t,g, or c

<400> 152
```
acccccggctc tccaaggagg tgtgacatca tcatcatctc tggccggaaa gaaaagtgtg 60
aggctgccaa ggaagctctg gaggcattgg ttcctgtcac cattgaagta gaggtgccct 120
ttgaccttca ccgttacgtt attgggcaga aaggaagtgg gatccgcaag atgatggatg 180
agtttgaggt gaacatacat gtcccggcac ctgagctgca gtctgacatc atcgccatca 240
cgggcctcgc tgcaaatttg gaccgggcca aggctggact gctggagcgt gtgaaggagc 300
tacaggccga gcaggaggac cgggctttaa ggagttttaa gctgagtgtc actgtagacc 360
ccaaatacca tcccaagatt atcgggagaa aggggggcagt aattacccaa atccggttgg 420
agcatgacgt gaacatccag tttcctgata aggacgatgg gaaccagccc caggaccaaa 480
ttaccatcac agggtacgaa aagaacacag aagctgccag ggatgctata ctgagaattg 540
tgggtgaact tgagcagatg gtttctgagg acgtcccgct ggaccaccgc gttcacgccc 600
gcatcattgg tgcccgcggc aaagccattc gcaaaatcat ggacgaattc aaggtggaca 660
ttcgcttccc acagagcgga gccccagacc ccaactgcgt cactgtgacg gggctcccag 720
agaatgtgga ggaagccatc gaccacatcc tcaatctgga ggaggaatac ctagctgacg 780
tggtggacag tgaggcgctg caggtataca tgaaacccc agcacacgaa gaggccaagg 840
caccttccag aggctttgtg gtgcgggacg caccctggac cgccagcagc agtgagaagg 900
ctcctgacat gagcagctct gaggaatttc ccagctttgg ggctcaggtg gctcccaaga 960
ccctcccttg gggcccccaaa cgataatgat caaaaagaac agaaccctct ccagcctgct 1020
gacccaaacc caaccacaca atggtttgtc tcaatctgaè ccagcggctg gaccctccgt 1080
aaattgttga cgctcttccc ccttcccgag gtccgcaggg agcctagcgc ctggctgtgt 1140
gtgcggccgc tcctccaggc ctggccgtgc ccgctcagga cctgctccac tgtttaacac 1200
taaaccaagg tcatgagcat tcgtgctaag ataacagact ccagctcctg gtccacccgg 1260
catgtcagtc agcactctgg ccttcatcac gagagctccg cagccgtggc taggattcca 1320
cttcctgtgt catgacctca ggaaataaac gtccttgact ttataaaagc caaacgtttg 1380
ccctcttcct ttcccacctc cctcctgcca gtttcccttg gtccagacag tcctgtttgt 1440
ggagtgcaat cagcctcctc cagctgccag agcgcctcag cacaggtgtc agggtgcaag 1500
gaagacctgg caatggacag caggaggcag gttcctggag ctngggggtg acctgagagg 1560
cagagggtga cgggttctna ggcagtcctg attttacctg ccgtggggtc tgaaarcacc 1620
aagggtccct gaccctacct ccactgcca                                  1649
```

<210> 153
<211> 660
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c

<400> 153
```
ccggaaattc ccgggtcgac ccacgcgkcc gcggnagwgc tcacacgtgt gctccctgcc 60
ctgctcctgg cccccttggcc ggccgggctg tttctggcca tgggtcgctc ccgccggaca 120
ggcgcgcacc gagcgcactc tctagcccgg cagatgaagg cgaacggcgg cggccggact 180
```

116

```
tggatgagat tcaccgcgag ctgcggcctc agggatccgc acgaccccag cccgacccaa 240
acgccgagtt cgaccccgac ctgccagggg gcggtctgca ccgctgtctg gcctgcgcga 300
ggtacttcat cgattccacc aacctgaaga cccacttccg atccaaagac cacaagaaaa 360
ggctgaagca gctgagcgtc gagccctaca gtcaggaaga ggcggagagg gcagcgggta 420
tgggatccta tgtgcccccc aggcggctgg cagtgcccac ggaagtgtcc actgaggtcc 480
ctgagatgga tacctctacc tgacatggcc tgaagatgca gggcagagga attgcccatg 540
gacagtgacg caaggactag gctgggaggg agcgtgccaa cccctttgc ctctgggttt 600
ggggagcgga gggcctcttc ttggtgccct gcccccaata aaggaactgg acaaagagaa 660
```

<210> 154
<211> 605
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (574)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (578)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (587)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (596)
<223> n equals a,t,g, or c

<400> 154
```
ggcagagctc caccttccat ccggcgccgg ctttcggcgc gacggtcgcc gcgttccatc 60
gtcgcgcggc ccttcgggcg cccgagcccg caatgtcggg ccccaacgga gacctgggga 120
tgccggtgga ggcgggagcg gaaggcgagg aggacggctt cggggaagca gaatacgctg 180
ccatcaactc catgctggac cagatcaact cctgtctgga ccacctggag gagaagaatg 240
accacctcca cgcccgcctc caggagctgc tggagtccaa ccggcagaca cgcctggagt 300
tccagcagca gctcgggggag gccccccagtg atgccagccc ctaggctcca agagcccccca 360
```

117

```
accgggaccc aaccctgcct ccctgggcta ggctctggcc tgggcactca mcccctggct 420
tagacamctt ctcaagggct ggccttcang gacccctggt gggtctgcct gcctgggcca 480
accttcctgc ctgggsctyc ccttggctam ctgggscagc ccccaccaac tggcatgccc 540
tcctgggggc caaagaatgg ggcctgcaac ccanccantt gcntgcncaa cccaanttcc 600
tgggg                                                         605
```

```
<210> 155
<211> 695
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (499)
<223> n equals a,t,g, or c

<400> 155
gaaccctaga aaaaaggatg cagtactaaa gtgtcattca ttcaaagcca ctcctctttt 60
ggtattccac ccattttcca gacggtgaca ctgaggctca ggaagcagta gggacttgca 120
caaagccctt tgggaagcag gctgggaaac agtggaggga gggtgtccat tanccccaag 180
gagacacagg atctgggctc tktytttsgc cttcctccca gaatacgctg ccatcaactc 240
catgctggac cagatcaact cctgtytgga ccacctggag gagaagaatg accacctcca 300
cgcccgcctc caggagctgc tggagtccaa ccggcagaca cgcctggagt tccagcagca 360
gctcggggag gccccagtg atgccagccc ctaggctcca agagccccca accgggaccc 420
aaccctgcct ccctgggcta ggctctggcc tgggcactca cccctggct tagacacctt 480
ctcaagggct ggccttcang gacccctggt gggtctgcct gcytgggcca cccttcctgc 540
ctgggrcctc cccttggkcc tactggggcc agcccccacc acctggcatg ccctcctggg 600
gccaagagtg ggcctgcaam ccacccattg sctgcccaac caattcctgg gcgytcccca 660
wtytgcccag gcttgaatgt tcacatgaaa tgggt                         695
```

```
<210> 156
<211> 780
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c

<400> 156
cggtgggctc gcgttgaggc tgcggtcatg gagggagcag gagctggatc cggcttccgg 60
aaggagctgg tgagcaggct gctgcacctg cacttcaagg atgacaagac caaagtgagc 120
ggggacgcgc tgcagctcat ggtggagttg ctgaaggtct tcgttgtgga agcagcagtc 180
cgcggcgtgc ggcaggccca ggcagaagac gcgctccgtg tggacgtgga ccagctggag 240
aaggtgcttc gcagctgctc tggacttcta gggatctcag ccgtggckna ggccaccccc 300
```

118

```
agaggagccc ctggtccaca gaagcaggcc ttgtgtttcc agcggcctct gataagaggc 360
agggaaggam ctgaaggatt tggarttgat tcaaacaaga tctctgggag tctccagcct 420
gtgcagaagg ggcaggactg cagtgcactg cgggccttgg agtgtccagt ggggacactg 480
gtgtgggaag gggcagcacc tggggagtcc ctgcctctcc tccctgggac aatagtgtgc 540
atgccacccg gggtcctaca ggcaggtgct gggaaaggcc tggccagcag gtagcctgtg 600
tgtttgacaa acagcagctg gcagcgctgc ctcctgccca cattcctgcc acccgacatc 660
aaagctggcg tgtgaccttt ccagccatgc gatattcccc ttggaagatg cttccccagg 720
ctataaattt gttctcacaa agcaacatca ataaatcaaa actgtctcty ccaaaaaaaa 780
```

<210> 157
<211> 1127
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1113)
<223> n equals a,t,g, or c

<400> 157
```
aacttcagtg ccctcactgt agaatttaaa agccttactg ttgattgccc atggtggact 60
tgatggagaa attaaatatc tttcattatg ctttacaaaa tactgtatat gtttcagcaa 120
gtttggggaa tgggagagga caaaaaaaag ttacatttaa tctatgcatt tttgccaagc 180
catattgagt tattttacta ctagagacat taggaaacta actgtacaaa agaaccaagt 240
ttaaaagcat tttgtggggt acatcatttc tataattgta taatgtattt ctttgtggtt 300
ttaaatgata aagacattaa gttaacaaac atataagaaa tgtatgcact gtttgaaatg 360
taaattattc ttagaacact ttcaatgggg gttgcattgt ccttttagtg ccttaatttg 420
agataattat tttactgcca tgagtaagta tagaaatttc aaaaaatgta ttttcaaaaa 480
attatgtgtg tcagtgagtt tttcattgat aattggttta atttaaaata tttagaggtt 540
tgttggactt tcataaattg agtacaatct ttgcatcaaa ctacctgcta caataatgac 600
tttataaaac tgcaaaaaat gtagaaggtt gcaccaacat aaaaaggaaa tatggcaata 660
catccatgat gttttccagt taacatagga attaccagat aaatactgtt aaactcttgt 720
ccagtaacaa gagttgattc atatggacag tatgatttat tgtttatttt tttaaccaaa 780
tacctcctca gtaatttata atggctttgc agtaatgtgt atcagataag aagcactgga 840
aaaccgatcg tctctaggat gatatgcatg tttcaagtgg tattgaaagc cgcactgatg 900
gatatgtaat aataaacata tctgttatta atatactaat gactctgtgc tcatttaatg 960
agaaataaaa gtaatttatg gatgggtatc tttaattttt actgcaatgt gttttctcat 1020
ggctgaaatg aatggaaaac atacttyaat tagtctctga ttgtatataa atgtttgtga 1080
aattccatgg ttagattaaa gtgtrttggg aanaattctc catgggg          1127
```

<210> 158
<211> 1282
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c

<220>

119

<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (732)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1279)
<223> n equals a,t,g, or c

<400> 158
tgctctacaa atagtaaaaa taaaaaataa aaaaagtagc tgggcgtggt ggtgtgcacc 60
tgtggtccca gctgcttggg atgctgaggt ggaaggatct cttaaaccca ggagggtggn 120
aggctgcagt gaacttgcga ttgcaccact ggcactccag tctgggggac agagtgagac 180
cccatctcaa aaaagtgttt aattnantat acttgtgagt ggtctatttg catttnaaaa 240
ctgctttcta gaattaggat agctccctta ggtttaatgt tttggtgagc aggaatatca 300
gttacccctc cagatcttaa ttctagtttt tttatcactt tttcatgagg tgatctcatc 360
ctcatctcct agcatgtctg gcaattttga tttctgaact ctgtgctacc tcagaggcca 420
gcttccttag ggaaaaatca gtgctgaaat aaagttatat ttccttttct gctctaaata 480
tatagtgggg gaataagaga aatgaagagg aattcctgag aacgtaatta ctagaaactc 540
ccctctccca cgtaatgtct ctcacacacc atggacccct attcccccaa tttgcgaccc 600
cccaccccac cccacaacag gtggtgatct ttgtgaagtc tgtgcagcgg tgcattgcct 660
tggcccagct actagtggag cagaacttcc cagccattgc catccaccgt gggatgcccc 720
aggaggagag gntttaaaga ttttcaacga cgaattcttg tggctaccaa cctatttggc 780
cgaggcatgg acatcgagcg ggtgaacatt gcttttaatt atgacatgcc tgaggattct 840
gacacctacc tgcatcgggt ggccagagca ggccggtttg caccaaggg cttggctatc 900
acatttgtgt ccgatgagaa tgatgccaag atcctcaatg atgtgcagga tcgctttgag 960
gtcaatatta gtgagctgcc tgatgagata gacatctcct cctacattga acagacacgg 1020
tagaagactc gcccattttg gaatgtgacc gtctgtcctt caggagagga caccagggtg 1080
ggggtgaagg agacactact gcccccaccc ctgacagccc ccaccccatg gcttccatct 1140
tttgcatcac caccactcct gaaccccat ttctgatttg tcagaatttt tttttaacaa 1200
aactaaaaat gaaacacatg tgtctgtggt atctaaaaaa aaaaaaaaaa aaawwggggg 1260
ggsgcccgta cccattggnc ct   1282

<210> 159
<211> 1505
<212> DNA

120

<213> Homo sapiens

<400> 159
ttacatgttg cagaagctaa ttgaagagac agataggttt gtagtgttca cagaagagga 60
atcaggcatg agtgaccagt tgtgtggcat tgctgcctgc cagacggatg acatatacaa 120
ccgaaactgc cttattgaat tggtcaacct gtcagatggt tcttcgtgga gcagagacak 180
aaggctgtgt cattgtgtca gctgccaaag cccaactgct gcagtgccag caccatccag 240
cctggtatgg tgatacattg aagcaaaaga catcctggac ttgcctcttg gatggcatgc 300
agtactttgc caccactgaa agcagcccca cagagcagga tggccgacag ctctggttag 360
aggtgaagaa tatcgaggag caccggcagc gtagtctgga ctctgtgcag gagctgatgg 420
agagtgggca ggcagtgggc ggcatggtta ccacaaccac agattggaac cagccagctg 480
aggcacagca agcccagcaa gtccagcgga tcatttcgcg ttgcaactgc cgaatgtact 540
atattagtta cagccatgac attgatcctg aactagcaac tcagattaag ccacctgaag 600
ttcttgagaa ccaggaaaag gaagatctcc taaagaagca ggaaggggct gtggatacct 660
tcacccttat ccaccatgag ctggaaattt ccaccaaccc agctcagtat gccatgatcc 720
tggacattgt caacaacctg ctgctccatg tagaacctaa gcggaaggaa catagtgaga 780
agaagcaacg ggtcaggttc cagcttgaga tctctagcaa tccagaggag caacgcagca 840
gcatactgca tttgcaggag gctgtgcggc agcatgtggc ccaaatacga cagctggaga 900
agcagatgta ttctatcatg aagtctttgc aggatgacag caagaatgag aatctgcttg 960
acctgaacca gaagcttcag ttgcagctaa accaggagaa ggccaacctg cagctggaaa 1020
gtgaagaact gaatatcctc atcaggtgtt ttaaggattt ccaactgcag cgggctaaca 1080
agatggagct gcgaaagcac aagaagatgt gagtgtggtc cgtcgcactg agttttactt 1140
tgctcaggca cggtggcgcc tgacagagga agatggacag ctgggaattg ctgaattaga 1200
actgcagagg ttcctctaca gcaaggtgaa taagtctgat gacacagcag aacatcttct 1260
ggagttgggc tggtttacca tgaacaacct cctccccaat gctgtctata aggtagtact 1320
gcggccccag agctcctgcc agtctgggcg acagctagct ctccgcctct tcagcaaagt 1380
tcggcccct gttggggata tctctgttaa ggagcatttt gaggtaaatg tggtgctctc 1440
accatccagc tgacacacca ttcttccaca gatgatgggc ttttctttcc tggccgaagt 1500
gtgga   1505

<210> 160
<211> 736
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (718)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (723)
<223> n equals a,t,g, or c

<400> 160
aggcacgagg gacacttggg gtctggacgc aacggcggcg ggagcatgaa cgccctcca 60
gccttcgagt cgttcttgct cttcgagggc gagaagatca ccattaacaa ggacaccaag 120
gtacccaatg cctgtttatt caccatcaac aaagaagacc acacactggg aaacatcatt 180
aaatcacgtg cctgcttccc cttcgccttc tgccgtgatt gtcagtttcc tgaggcctcc 240
ccagccacgc ttcctgtaca gcctgcagaa ctgtgagtca attaaacctc ttttcttcat 300

```
aaattaccca gtttctcata gttctttata gcagtgtgaa aacagactaa tggacccttc 360
tggttgaagg aatgcagcca ttctgcttgt ttgactatgt cctttctatt catctctatt 420
tcctgggagg tgtttatcca agtgcaatag gaggtattgg tgaccgcaca gtccectcag 480
tgttctgcta gtaaatagtt gaaggttgat cattgatctt ctgcgttttc agtctggcat 540
ggaaaagccc ctgtgcaact ggtaaagata tcaataagca cctggtgggt ggcgggggta 600
gtccaggctt gtcttgcaac tgtatgttct cttcagaccc ctccctggcg atgccagatt 660
cactgggctg gcagattctg ccccccccaa aaaaaaaaaa aaaatattaa taataaanaa 720
aanagactcc caggga                                                  736
```

<210> 161
<211> 995
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (889)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (899)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (928)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (933)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (938)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (974)
<223> n equals a,t,g, or c

<400> 161
```
gggtcgaccc acgcgtccgg gcggcctcgg cagcggtgtt ctcgcgcttg cgaasgggnc 60
```

122

```
tccggctcgg ctcgcgggga ctgtgcacga ggttggcgac gcgccccgcc gggccccaga 120
tcaggccgca gagatcggga gccgcgggag cactaaggcg caagggccac agcagcagcc 180
gggctcagag ggtcccagct atgccaaaaa agttgcgctc tggcttgctg ggctgcttgg 240
agctggtggg actgtgagcg tcgtctatat ctttggaaac aacccggtgg acgaaaatgg 300
tgccaagatt cctgatgagt tcgacaatga tccaattctg gtacagcagt tgcgccggac 360
atacaaatat ttcaaagatt atagacagat gatcatcgag cccaccagcc cttgccttct 420
cccagaccct ctgcaggaac cgtactacca gccaccctac acgctcgttt tggagctcac 480
cggcgtcctc ttgcatcctg agtggtcgct ggccactggc tggaggttta agaagcgccc 540
aggcatcgag accttgttcc agcagcttgc ccctttatat gaaattgtca tctttacgtc 600
agagactggc atgactgcgt ttccactcat tgatagtgtg gacccccatg gcttcatctc 660
ctaccgccta ttccgggacg ccacaagata catggatgga caccatgtaa aggatatttc 720
atgtctgaat cgggacccag ctcgagtagt agttgtggac tgcaagaagg aagccttccg 780
cctgcagccc tataacggcg ttgccctgcg gccctgggac ggcaactctg atgaccgggt 840
cttgttggat ctgtctgcct tcctcaagac cattgcactg aatggtgtng gaggacgtng 900
cgaaccgtgc tgggagcatt atgccctngg ganggatnga ccccgctggg cggctttyc 960
aaacagcggc aaancgggct tagaagcagg gagga                               995
```

<210> 162
<211> 1125
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (972)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1023)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1077)
<223> n equals a,t,g, or c

<400> 162
```
gccctagtac ggtccggaat tcccgggtcg acccacgcgt ccgcccacgc gtccgcgctg 60
gtgttgcggc gctggcgaca gtcggggttg cgagcggccc ggggccgggg cggccagggc 120
cgctgcagga cgagaccctg ggtgtggcgt ccgtgccctc gcagtggagg gccgtccagg 180
gcatccgcgg ggagacgaaa agttgccaga cggccagcat tgccactgcc agtgcatccg 240
cccaggccag gaatcatgtg gacgcccagg tgcagacgga ggcccccgtg cctgtcagcg 300
tgcagccccc gtcccagtay gacataccca ggctcgcagc ctttcttcgg agagtggagg 360
ccatggtcat ccgagagctg aacaagaatt ggcagagcca cgcgtttgat ggcttcgagg 420
tgaactggac cgagcagcag cagatggtgt cttgtctgta taccctgggc tacccgccag 480
cccaagcgca gggtctgcat gtgaccagca tctcctggaa ctccactggc tctgtggtgg 540
cctgtgccta cggccggctg gaccatgggg actggagcac gcttaagtcc ttcgtgtgtg 600
cctggaacct ggaccggcga gacctgcgtc cccagcaacc gtcggccgtg gtggaggtcc 660
ccagcgctgt cctgtgtctg gccttccacc ccacgcagcc ctcccamgtc gcaggagggc 720
tgtacagtgg tgaggtgttg gtgtgggacc tgagccgtct tgaggacccg ctgctgtggc 780
```

123

```
gcacaggcct gacggatgac acccacacag accctgtgtc ccaggtggtg tggctgcccg 840
agcctgggca cagccamcgg ttycaggtgc tkagtgtggc cacygacggg aaggtgctac 900
tctggcargg catcgggggta rgccagctgc agttcacaga rggcttcgcc tggttcatkc 960
agcagctgcc anggagcacc aagctcaaga agcatccccg cgggagaccg aggtgggcgc 1020
canggcaggc tttcttccag tttgacctca ggttttcatt ttggcaggaa gcggttnccg 1080
ttcaattttc ctggcattgg agagcagcct taaggggtgc ccatt              1125
```

<210> 163
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c

<400> 163
```
gggtcgaccc acgcgtccga gatggcgttt cgcagcaaga ggccggagca cggcgggccc 60
ccggagctgt tttatgacaa gaatgaagcc cggaaatacg tgcgcaactc acggatgatt 120
gatgtccaga ccaaaatggc tgggcgagct ttggagctcc tttgtctgcc ggaggtcagc 180
cctgttacct cttggatatt ggctgtggtt ctgggctgag tggagattat ctctcggatg 240
aagggcacta ctgggtaggc atcgacatca gccctgccat gctggatgcg gccttggacc 300
gagacactga gggagacctg cttctggggg acatgggcca gggcatcccc ttcaaaccag 360
kttcattgat ggatgtatca gcattctgcn aatcagtggc tctgtaatgc aaaccaagaa 420
gtc                                                             423
```

<210> 164
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1614)
<223> n equals a,t,g, or c

<400> 164
```
acccacgcgt ccggcggctg gcggagcaga acggattgca gggtcagcca tgtcatctga 60
gcctccccca ccaccacagc cccccacccca tcaagcttca gtcgggctgc tggacacccc 120
tcggagccgt gagcgctcac catcccctct gcgsggcaac gtggtcccaa gcccactgcc 180
cactcgccgg acgaggacct tctcggcgac ggtgcgggct tcacagggcc ccgtctacaa 240
aggagtctgc aaatgcttct gccggtccaa gggccatggc ttcattaccc cagctgatgg 300
cggccccgac atcttcctgc acatctctga tgtggaaggg gagtatgtcc cagtggaagg 360
cgacgaggtc acctataaaa tgtgctccat cccacccaag aatgagaagc tgcaggccgt 420
ggaggtcgtc atcactcacc tggcaccagg caccaagcat gagacctggt ctggacatgt 480
catcagctcc taggagatgg tggaagcacc ccttgtcctg tgcttgtggg agactttgcg 540
gggaggaggc agcagacact ggagatgaca ttcttccaca cgagacgggg cttcagccgg 600
gcatggtccc tctcaagtat ctcctggagg aagggggtatg ggggcaggt gtggggtgtg 660
gggtgttccc ggccatcagc acagcctatg accattgcaa caacctctca ccatctgaag 720
agcattaaaa gcatttaaaa aggaraggtg cccactggtg gctgagtgga ggttccaacc 780
```

124

```
ccatcccagg gagtggatca agggtggtat ttctccagct gctcagacac atgggctcaa 840
cccacagaat ccctcttcct cctggagctg gaggccccag attcccagat ctggcccct 900
ggcagcctga cagggacctt gcgtgacttc tccaaggcaa atttccacct aagtgcccct 960
tgcgcctctc ctgggggctg ggcaaagcag ttttctaatt cttggcttgg ttggttctag 1020
gggagctggc ttgaagtggg kggggaaagg cgggggtggc ggtctttgga ttggacggat 1080
gttgcctttt ggtgcctttg cagtgggagg cggcatagct gcctgtctgg ggaagacagt 1140
tctcccagca ctcccacccc tggcacagc aggctggtac tgggaggctg aaccctctt 1200
agagcctgac cttttcatct gccttctggt tgtgtgacca tcactcaaca gccatttcac 1260
agccctgta attatggcgg cgggggctg gggtggtggt ggtgggaagg gcttgtggag 1320
aggacacagt ctttgtttaa aaactttgtc ccgatccatc cagaaaagag taggtagctt 1380
gcatcctgac agcctggcaa agtcaagaaa gttgaaggag aaacatacct ttggagaggg 1440
ggttttcttt aaaactagtg ttaagaaatg cttagggatt ttttttttct tatttttcat 1500
aactaaagct ttcacccaga gccggctctg tttgcacttt gctgccgaca ttgcaaactt 1560
tttggcaggg tgggagactg agtctcattc tgtcamccag gctggagtgc agtngcccga 1620
tctcagcttt actgcaacct ct                                          1642
```

<210> 165
<211> 1115
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c

<400> 165
```
aggaatgccg agtactgcag gggctcccca gggagtatgt gaatgccagg cactgtttgc 60
cgtgccaccc tgagtgtcag ccccagaatg gctcagtgac ctgttttgga ccggaggctg 120
accagtgtgt ggcctgtgcc catcaagtgg atggcgctgg agtccattct ccgccggcgg 180
ttcacccacc agagtgatgt gtggagttat ggtgtgactg tktgggagct gatgactttt 240
ggggccaaac cttacgatgg gatcccagcc cgggaggatc cctgacctgc tggaaaaggg 300
ggagcggctg ccccagcccc ccatctgcac cattgatgtc tacatgatca tggtcaaatg 360
ttggatgatt gactctgaat gtcggccaan attncgggag ttggtgtktg aattctcccg 420
catggccagg acccccagc gctttgtggt catccagaat gaggacttgg gcccagccag 480
tcccttggac agcaccttct accgctcact gctggaggac gatgacatgg gggacctggt 540
ggatgctgag gagtatctgg taccccagca gggcttcttc tgtccagacc ctgccccggg 600
cgctgggggc atggtccacc acaggcaccg cagctcatct accaggagtg gcggtgggga 660
cctgacacta gggctggagc cykctgaaag aggaggcccc caggtctcca ctggcaccct 720
ccgaagggct ggctccgatg tatttratgg tgacctggga atggggcag ccaagggct 780
gcaaagcctc cccacacatg accccagccc tctacagcgg tacagtgagg accccacagt 840
accctgccc tctragactg atggctacgt tgccccctg acctgcagcc cccagcctga 900
atatgtgaac cagccagatg ttcggcccca gcccccttcg ccccgagagg gccctctgcc 960
tgctgcccga cctgctggtg ccactctgga aaggsccaag actctctccc cagggaagaa 1020
tggggtcgtc aaagagtttt tgcctttggg ggtgccgtgg agaaccccga gtattgacac 1080
cccaggggag ggagcttgcc cttcagcccc acctt                            1115
```

125

```
<210> 166
<211> 1066
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (739)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (968)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1023)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1025)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1042)
<223> n equals a,t,g, or c

<400> 166
gggcacgagn cacctgagcc ccttgtctcg caccggctcc caggagggca cctccatgga 60
gggctcccgc cccgctgccc ctgccagagc caggcaccct caagaccagt ctggtggcta 120
ctccaggcat tgacaagctg accgagaagt cccaggtgtc agaggatggc accttgcggt 180
ccctggaacc tgagccccag cagagcttgg aggatggcag cccggctaag ggggagccca 240
gccaggcatg gagggagcag cggcgaccgt ccacctcatc agccagtggg cagtggagcc 300
caacgccaga gtgggtcctc tcctggaagt cgaagctgcc gctgcagacc atcatgaggc 360
tgctgcaggt gctggttccg cagtggagaa gatctgcatc gacaagggcc tgacggatga 420
gtctgagatc ctgcggttcc tgcagcatgg caccctggtg gggctgctgc ccgtgcccca 480
ccccatcctc atccgcaagt accaggccaa ctcgggcact gccatgtggt tccgcaccta 540
catgtgggc gtcatctatc tgaggaatgt ggacccccct gtctggtacg acaccgacgt 600
gaagctgttt gagatacagc gggtgtgagg atgaagccga cgaggggctc agtctagggg 660
aaggcagggc cttggtccct gaggcttccc ccatccacca ttctgagctt taaattacca 720
cgatcagggc ctggaacang cagagtggcc ctgagtgtca tgccctagag acccctgtgg 780
ccaggacaat gtgaactggc tcagatcccc ctcaacccct aggctggact cacaggagcc 840
```

126

```
ccatctctgg ggctatgccc caccagagac cactgccccc aacactcgga ctccctcttt 900
aagacctggg ytcagtgctg gcccctcagt gcccaccact cctgtgctac ccagcccccaa 960
gaggcagnaa rccaatgggt cactgttgcc cctaaagggg ggttttttgaa ccaaggggga 1020
aancnacggg gcctggttcc cntttggaaa ggtttcccct gggaaa            1066
```

```
<210> 167
<211> 657
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (564)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (597)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (635)
<223> n equals a,t,g, or c

<400> 167
gtcgcgagcg ctgccgtcgg gaggcgctcc gaggttcgag gctgtgcccc gcgaccccgc 60
cttcggcgct cggctcgcag gatggatccc gtacccggga cagactcggc gccgctggct 120
ggcctggcct ggtcgtcggc ctctgcaccc ccgccgcggg gkttcagcgc gatctcctgc 180
accgtcgagg gggcaccgcc agctttggca agagcttcgc gcagaaatct ggctacttcc 240
tgtgccttag ttctctgggc agcctagaga acccgcanga gaacgtggtg gccgatatcc 300
agatcgtggt ggacaagagc cccctgccgc tgggcttctc ccccgtctgc gamcccatgg 360
attccaaggc ctctgtgtcc aagaagaaac gcatgtgtgt gaarctgttg cccctkggar 420
ccamggacac ggctgtgttt gatgtccggc tgagtgggaa gaccaagaca gtgcctggat 480
accttcgaat aggggacatg ggcggctttg ccatctggtg caagaaaggc caaggccccg 540
aggccagttg cccaaagccc cgangtcctc agcccgggac atgcaagggc ttctctntgg 600
angcagccag ccagcccaag ttaagggcgg gcctncttgg aagccggaca agcgttc   657
```

```
<210> 168
<211> 1026
<212> DNA
```

127

<213> Homo sapiens

<220>
<221> misc feature
<222> (1011)
<223> n equals a,t,g, or c

<400> 168
ggcacgagga gagatggagg ggcggcaggt gctggaggtc aagatgcagg tggagtacat 60
gtcattcagc gcacacgcgg acgccaaggg catcatgcag ctggtgggcc aggcagagcc 120
gkagagcgtg ctgctggtgc atggcgaggc caagaagatg gagttcctga agcagaagat 180
cgagcaggag ctccgggtca actgctacat gccggccaat ggcgagacgg tgacgctgcc 240
cacaagcccc agcatccccg taggcatctc gctggggctg ctgaagcggg agatggcgca 300
ggggctgctc cctgaggcca agaagcctcg gctcctgcac ggcaccctga tcatgaagga 360
cagcaacttc cggctggtgt cctcagagca agccctcaaa gagctgggtc tggctgagca 420
ccagctgcgc ttcacctgcc gcgtgcacct gcatgacaca cgcaaggagc aggagacggc 480
attgcgcgtc tacagccacc tcaagagcgt cctgaaggac cactgtgtgc agcacctccc 540
rgacggctct gtgactgtgg agtccgtcct cctccaggcc gccgcccctt ctgaggaccc 600
aggcaccaag gtgctgctgg tctcctggac ctaccaggac gaggagctgg ggagcttcct 660
cacatctctg ctgaagaagg gcctcccca ggcccccagc tgaggccggc aactcaccca 720
gccgccacct ctgccctctc ccagctggac agaccctggg cctgcacttc aggactgtgg 780
gtgccctggg tgaacagacc ctgcaggtcc catccctggg gacagaggcc ttgtgtcacc 840
tgcctgccca ggcagctgtt tgcagctgaa gaaacaaact ggtctccagg ctgtcttgcc 900
tttattcctg gttagggcag gtggtcctag acagcagttt ccagtaaaag ctgaacaaaa 960
aaaaaaaaaa aaaaaattgg gggggggccc gttacccatt tggcctttag nggggggtttt 1020
aaatta 1026

<210> 169
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (730)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (733)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (754)
<223> n equals a,t,g, or c

<400> 169
ggcataaaca tcgggtggtg ttcagatcct gctgccggca gctcgaggct aggatggctg 60
gagatgtgag ggcctttgtc tcatcacatc cgagcacagc tcagcaagat gctcttagct 120
agraaacaga ttttatgtgt taatgttaaa aattttgcag ttatttatct tgtggatatt 180

```
acagaagtgc ctgacttcaa caaaatgtat gagttatacg atccatgtac tgtcatgttt 240
ttcttcagga acaagcacat catgattgac ttggggactg gcaacaacaa caagattaac 300
tgggccatgg aggacaagca ggagatggtg gacatcatcg agacggtgta ccgcggggcc 360
cgcaaargcc gcggcctggt ggtgtccccc aaggactact ccaccaagta ccgctactga 420
ggcgccctca gtctgcgcgg ataaatgtcg tggagccctt tttgtatgga aacgttttaa 480
gctatttaaa gcctttggaa aatacaggaa gctccagggc tggagcacct ctgagatgga 540
attgataaca tggtcttaac tcaccgaaat aaacaagcac gtggtgagag gagcaggcct 600
acttgtttgt tctcaggaaa cttaatgaat agattactga ttttcctagt caaagttaat 660
tcttaccctt ggagtaaaac gaaggtgttt atcctgtgag cctgtgcgtt ttgcatactg 720
ggttggtttn ctngggcttc ggtgacagca tatnccgcga gctgggcttt aaca        774
```

```
<210> 170
<211> 402
<212> DNA
<213> Homo sapiens
```

```
<400> 170
ggcacgagcg gcggtggggc ggacagccgg ggtgcgcact tgggcccccc tggccatggc 60
ggcgaaggtg gacctgagca cctccaccga ctggaaggag gcgaaatcct ttctgaaggg 120
cctgagtgac aagcagcggg aggaacatta cttctgcaag gactttgtca ggctgaagaa 180
gatcccgaca tggaaggaga tggcgaaagg ggtggctgtg aaggtggagg agcccaggta 240
taaaaaggac aagcagctca atgagaaaat ctccctgctc cgcagcgaca tcaccaagct 300
ggaggtggac gccatcgtca acgccgccaa cagctccccg ccccgagga gcctaattaa 360
agatcttcgt tgtggcaaaa aaaaaaaaaa aaaaaaaaa aa                       402
```

```
<210> 171
<211> 796
<212> DNA
<213> Homo sapiens
```

```
<400> 171
aggcatcggg gacagccgct gcggcagact cgagccagct caagcccgca gctcgcaggg 60
agatccagct ccgtcctgcc tgcagcagcc caaccctgca cacccaccat ggatgtyttc 120
aagaagggct tctccatcgc caaggagggc gtggtgggtg cggtggaaaa gaccaagcag 180
ggggtgacgg aagcagctga gaagaccaag gaggggggtca tgtatgtggg agccaagacc 240
aaggagaatg ttgtacagag cgtgacctca gtggccgaga agaccaagga gcaggccaac 300
gccgtgagcg aggctgtggt gagcagcgtc aacactgtgg ccaccaagac cgtggaggag 360
gcggagaaca tcgcggtcac ctccgggggtg gtgcgcaagg aggacttgag gccatctgcc 420
ccccaacagg agggtgaggc atccaaagag aaagaggaag tggcagagga ggcccagagt 480
gggggagact agagggctac aggccagcgt ggatgacctg aagagcgctc ctctgccttg 540
gacaccatcc cctcctagca caaggagtgc ccgccttgag tgacatgcgg ctgcccacgc 600
tcctgccctc gtctccctgg ccacccttgg cctgtccacc tgtgctgctg caccaacctc 660
actgccctcc ctcggcccca cccaccctct ggtccttctg accccactta tgctgctgtg 720
aattttttttt ttaaatgatt ccaaataaaa cttgagccca ctyctaaaaa aaaaaaaaaa 780
aaaaaaaagg gggccc                                                  796
```

```
<210> 172
<211> 478
<212> DNA
<213> Homo sapiens
```

```
<400> 172
aattcggcag agcctggttg cagggcagct aggggtctct gcattctcca catggtctca 60
tgcccccttt tgtcccctac aggaggactt gaggccatct gcccccccaac aggagggtga 120
ggcatccaaa gagaaagagg aagtggcaga ggaggcccag agtgggggag actagagggc 180
tacaggccag cgtggatgac ctgaagagcg ctcctctgcc ttggacacca tccctcccta 240
gcacaaggag tgcccgcctt gagtgacatg cggctgccca cgctcctgcc ctcgtctccc 300
tggccaccct tggcctgtcc acctgtgctg ctgcaccaac ctcactgccc tccctcggcc 360
ccacccaccc tctggtcctt ctgaccccac ttatgctgct gtgaattttt tttttaaatg 420
attccaaata aaacttgagc ccactcctaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 478


<210> 173
<211> 656
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c


<400> 173
tttcccaatg cctgccacca cggagactca gggccacctg ccaccctccc tcgctgccnt 60
ctgcccttgg gatggggcgc tcctgaatgt acgtgggccc cggtgtttac aaggaggtga 120
tcatctacaa cctctgccag aagcaggtgg tggagaagat accactgccc ttttttgcca 180
tgtccctgag cctgtccccc gggacccacc tcctggctgt tggctttgct gagtgcatgc 240
tgaggctggt agactgtgcc atggggactg cccaagactt tgccggccac gacaacgcag 300
tgcacctgtg caggtttaca ccktccgcca ggctgctctt cacggccgcc cgcaacgaga 360
tccttgtgtg ggaggtcccc ggcctctgag atgcagcagg gactgtggtg gtgggcatca 420
acgcctggtc atgccaggca cctggacaca ggcttggcag aggcgccagg ttgtcaatgg 480
cctcatgctg ggacaggcca ggattcacgt aaatcgcctg gagcaagctg ttgtaaattt 540
ggcgccctgt gaatactttc atacctgttg cccttttgcc taagaaatct ttaatgtttc 600
tatcttgtaa taaacatggg cattattgc aaaaaaaaaa aaaaaaaaaa aaaaaa 656


<210> 174
<211> 1891
<212> DNA
<213> Homo sapiens


<400> 174
gagccccctc cgagagggga gaccagcggg ccatgacaag ctccaggctt tggttttcgc 60
tgctgctggc ggcagcgttc gcaggacggg cgacggccct ctggccctgg cctcagaact 120
tccaaacctc cgaccagcgc tacgtccttt acccgaacaa ctttcaattc cagtacgatg 180
tcagctcggc cgcgcasccg gctgctcagt cctcgacgag gccttccagc gctatcgtga 240
cctgcttttc ggttccgggt cttggcccccg tccttacctc acagggaaac ggcatacact 300
ggagaagaat gtgttggttg tctctgtagt cacacctgga tgtaaccagc ttcctacttt 360
ggagtcagtg gagaattata ccctgaccat aaatgatgac cagtgtttac tcctctctga 420
gactgtctgg ggagctctcc gaggtctgga gactttttagc cagcttgttt ggaaatctgc 480
tgagggcaca ttctttatca acaagactga gattgaggac tttccccgct ttcctcaccg 540
gggcttgctg ttggatacat ctcgccatta cctgccactc tctagcatcc tggacactct 600
ggatgtcatg gcgtacaata aattgaacgt gttccactgg catctggtag atgatccttc 660
cttcccatat gagagcttca ctttttccaga gctcatgaga aaggggtcct acaaccctgt 720
```

130

```
cacccacatc tacacagcac aggatgtgaa ggaggtcatt gaatacgcac ggctccgggg 780
tatccgtgtg cttgcagagt ttgacactcc tggccacact ttgtcctggg gaccagktat 840
ccctgggatt actgactcct tgctactctg ggtctgagcc ctctggcacc tttggaccag 900
tgaatcccag tctcaataat acctatgagt tcatgagcac attcttctta gaagtcagct 960
ctgtcttccc agatttttat cttcatcttg gaggagatga ggttgatttc acctgctgga 1020
agtccaaccc agagatccag gactttatga ggaagaaagg cttcggtgag gacttcaagc 1080
agctggagtc cttctacatc cagacgctgc tggacatcgt ctcttcttat ggcaagggct 1140
atgtggtgtg gcaggaggtg tttgataata aagtaaagat tcagccagac acaatcatac 1200
aggtgtggcg agaggatatt ccagtgaact atatgaagga gctggaactg gtcaccaagg 1260
ccggcttccg ggcccttctc tctcccccct ggtacctgaa ccgtatatcc tatggccctg 1320
actggaagga tttctacgta gtggaacccc tggcatttga aggtacccct gagcagaagg 1380
ctctggtgat tggtggagag gcttgtatgt ggggagaata tgtggacaac acaaacctgg 1440
tccccaggct ctggcccaga gcargggctg ttgccgaaag gctgtggagc aacaagttga 1500
catctgacct gacatttgcc tatgaacgtt tgtcacactt ccgctgtgag ttgctgaggc 1560
gaggtgtcca ggcccaaccc ctcaatgtag gcttctgtga gcaggagttt gaacagacct 1620
gagccccagg caccgaggag ggtgctggct gtaggtgaat ggtagtggag ccaggcttcc 1680
actgcatcct ggccagggga cggagcccct tgccttcgtg ccccttgcct gcgtgcccct 1740
gtgcttggag agaaaggggc cggtgctggc gctcgcattc aataaagagt aatgtggcat 1800
ttttctataa taaacatgga ttacctgtgt ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaag g                                1891
```

<210> 175
<211> 2161
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2153)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2160)
<223> n equals a,t,g, or c

<400> 175
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cgcttccgtc cacttggcga gtgagacgct gatgggagga tggacrtact ggtgtctgag 60
tgctccgcgc ggctgctgca gcaggaagaa gagattaaat ctctgactgc tgaaattgac 120
cggttgaaaa actgtggctg tttaggagct tctccaaatt tggagcagtt acaagaagaa 180
aatttaaaat taaagtatcg actgaatatt cttcgaaaga gtcttcaggc agaaaggaac 240
aaaccaacta aaaatatgat taacattatt agccgcctac aagaggtctt tggtcatgca 300
attaaggctg catatccaga tttggaaaat cctcctctgc tagtgacacc aagtcagcag 360
gccaagtttg gggactatca rtgtaatagt gctatgggta tttctcagat gctcaaaacc 420
aaggaacaga aagttaatcc aagagaaatt gctgaaaaca ttaccaaaca cctcccagac 480
aatgaatgta ttgaaaaagt tgaaattgct ggtcctggtt ttattaatgt ccacttaaga 540
aaggattttg tatcagaaca attgaccagt cttctagtga atggagttca actacctgct 600
ctgggagaga ataaaaaggt tatagttgac ttttcctccc ctaatatagc taaagagatg 660
catgtaggcc acctgaggtc aactatcata ggagagagta taagccgcct ctttgaattt 720
gcagggtatg acgtgctcag gttaaatcat gtaggagact gggggacmca gtttggcatg 780
ctcatcgctc acctgcaaga caaatttcca gattatctaa cagtttcacc tcctattggg 840
```

131

```
gatcttcagg tcttttataa ggaatctaag aagaggtttg atactgagga ggaatttaag 900
aagcgagcat atcagtgtgt agttctgctc cagggtaaaa acccagatat tacaaaagct 960
tggaagctta tctgtgatgt ctcccgccaa gagttaaata aaatctatga tgcattggac 1020
gtctctttaa tagagagagg ggaatccttc tatcaagata ggatgaatga tattgtaaag 1080
gaatttgaag atagaggatt tgtgcaggtg gatgatggca gaaagattgt atttgtccca 1140
gggtgttcca taccattaac catagtaaaa tcagatggag gttataccta tgatacatct 1200
gacctggctg ctattaaaca aagactattt gaggaaaaag cagatatgat tatctatgtt 1260
gtggacaatg gacaatctgt gcacttccag acaatatttg ctgctgctca aatgattggt 1320
tggtatgacc ctaaagtaac tcgagtcttc catgctggat ttggtgtggt gctaggggaa 1380
gacaagaaaa agtttaaaac acgttcgggt gaaacagtgc gcctcatgga tcttctggga 1440
gaaggactaa aacgatccat ggacaagttg aaggaaaaag aaagagacaa ggtcttaact 1500
gcagaggaat tgaatgctgc tcagacatcc gttgcrtatg gctgcatcaa atatgctgac 1560
ctttcccata accggttgaa tgactacatc ttctcctttg acaaaatgct agatgacaga 1620
ggaaatacag ctgcttactt gttgtatgcc ttcactagaa tcaggtctat tgcacgtctg 1680
gccaatattg atgaagaaat gctccaaaaa gctgctcgag aaaccaagat tcttttggat 1740
catgagaagg aatggaaact aggccggtgc attttacggt tccctgagat tctgcaaaag 1800
attttagatg acttatttct ccacactctc tgtgattata tatatgagct ggcaactgct 1860
ttcacagagt tctatgatag ctgctactgt gtggagaaag atagacagac tggaaaaata 1920
ttgaaggtga acatgtggcg tatgctgcta tgtgaagcag tagctgctgt catggccaag 1980
gggtttgata tcctgggaat aaaacctgtc caaaggatgt aatccttcat aggtttgaac 2040
actgtgtgtt tttaccaaag tgccattggc actgtttgct tttttacaat catgtggaca 2100
caagcataag taaagaaaat ttgtcaacca gaaaaaaaaa aaaaaaaaa aanaaaaaan 2160
a                                                                  2161
```

<210> 176
<211> 2411
<212> DNA
<213> Homo sapiens

<400> 176
```
gggatcctgg ctaccactct gaatccgata ccgcttctct tagaccgtca ctgagacaac 60
ggttaccgtg acaaccgagc ccgagaaccg gagccttacc atcaaacttc ggaaacggaa 120
gccagagaaa aaggtagaat ggacaagtga cactgtggac aatgaacaca tgggccgccg 180
ctcatcmaaa tgctgctgta tttatgagaa acctcgggcc tttggcgaga gctccacgga 240
aagtgatgag gaggaagaag agggctgtgg tcatacacac tgtgtacgtg gccaccgcaa 300
aggacggcgt cgtgcaaccc taggaccgac ccccaccacc cctccccagc ctcctgaccc 360
ttcccagccc cctccagggc caatgcagca ctaaatccct ctctcctcca gcattcctgt 420
gtctgtctgg ccctaaatgt atccatgtgg ctacttctcc agcccctcc ttcctctct 480
tctgcctgat agagggaaga ggaagaggag gacgaacaga gatcctgaaa ttctgacttg 540
ctgctattcc agaacccagc ctcctgggtt tccccagtcc tcatttttcc tcccaatacc 600
caccccttctc tctcgaggga tctaggcacc ttggtcccag tgtcttcctt ttgttctcac 660
tgccaaactg cctgtcctgg gatctagtta tcttggccct gcactctcaa catgagtagc 720
gaacacttaa attgggtttt caacagtccc agctttcact gccagggtcc cagtcagatt 780
ccaggaattt gcgccctaac tttgcttgct aatcctggtt tagagctatc ccactaaaat 840
atttaatcct aattcttagt ccttgcctgt gagatatgag gtcttacagg agacctcaga 900
gctcccagcc cttctcctcc tgctaaccct tctcacaccc tcaagaggag ttagaaaaga 960
ggtccttgtc attctcacct cttatggaaa atggaataag aaataatcat atcctttctt 1020
cccaccccttc tcctgttatt taggatttct gacaaagctg gcttgagatt ggtcacttag 1080
agccgactgt ctcctctgcc ttttgttttt cagcttcaga gacagatcca atatagtccc 1140
agggacctgg gtctctggga gaggaaggaa gagggaggga gcaaagagat tggggtatgt 1200
cccctgtagt acactcttac ctcttacttc ctagactttg atttctccgg cagcccagat 1260
```

```
gttcagttct cttggccccct ctctaccct tactgggatc tggttttcat tttccggtcc 1320
ttttgccata cacagttaca gagatcagtc aaatccatac caccactgag atctcatttа 1380
ttgccacaga tgcacaaaat aaataaccca aaatcacaaa atgtgttaaa tatgggccca 1440
tttatactta tggggaaggg tktkagactw twcacaagga tgartttgga ratktctgaa 1500
gtattcccag gttkaggarg agagagggga aatagcacca ttggttcctt tccgtgagta 1560
tgtgcgggga gaagtttcaa gaaggttctt atggaaaaaa ggctgtgagc atagaaagca 1620
gtcataggag gttggggaac tagcttgtcc ctccccaccc ccagatcctg caaaagaggt 1680
acaaagcttc ccagaggcca cagggccaga ccagagtcaa gcctcttgtt ttaggagaaa 1740
cctcagtgga caggcagggt agcccagtcc ttagatctgt kgggaaggcc ctgagccctt 1800
ctggagctag gagtggcaag agtgggagtc aagtatttga ccagcagagc ctctatgtag 1860
gaatcatggt cactttacca atactgatgg ggagggcctg ttccccattg caggcctaga 1920
atggtttgaa tgggagaagt caggaagtac tgtagtagct gtaggggaga gaagattctg 1980
agagccagaa ggcmwsgaat ggatttggtt ttgagcaggg acgtggaaac gtggagacca 2040
ggtgaggtct cattattttg gggcgaaaat gtgggttgct attaatactc ctgcaatggg 2100
cgtgtgaatg tgttcccaga aatgagtggg gaattccacc cccaaaaagc agctgcaggg 2160
ccagtgscgg gccaaacttc tagttggaga cgagactcag ctttccgctg gtacaatgcg 2220
gacggagcac gagggtcgca ggtgcagaac agcgggaaga tgcgctcccc aggggggccag 2280
ggcctggaag gtaaagcagg tcgagtgagc ggccgtcgta gagagccacc ggccccgctc 2340
ccagtccagg tccamgcgaa atgccgcggc gggggctcaa caccgcccag cagggtgggt 2400
tcgggtgccg t                                                    2411
```

<210> 177
<211> 1338
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1234)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1276)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1289)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1326)
<223> n equals a,t,g, or c

<400> 177
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ggcacgagaa aaaactcaga aatgctaagt gtacttattt gttgaagaaa cttgttacat 60
attactaaca tcttttttttt ttatgagaaa tacttttccc ataaccaaaa aattcagtga 120
gcagaatggc cttgcttgag gtttttgcaa atctctcggg tgtctggctt agtgggaggc 180
agctgggccc tcatacctgc ctccgcactt cagctgtttg acataaaccc agcttcgtgt 240
```

```
gagtgaaagg gaagggcctg gggacccтca gaggttctcg gaccacactt tgagaactcc 300
tcgtctggaa gacaggcctg gggatgccat gtgggggtgag ggcttacggg cttggtgtcg 360
ctttgtggag aaccgctggt gtctgaagcg ggtgtcagcc ccactgcacc ttggtcttct 420
gggctgtcct gatgccgagg cccacttccc agccatgctg actttgcctc tttcccctcc 480
cagcagaaaa atggctacaa acttcctagc acatgagaag atctggttcg acaagttcaa 540
atatgacgac gcagaaagga gattctacga gcagatgaac gggcctgtgg caggtgcctc 600
ccgccaggag aacggcgcca gcgtgatcct ccgtgacatt gcgagagcca gagagaacat 660
ccagaaatcc ctggctggaa gctcaggccc cggggcctcc agcggcacca gcggagacca 720
cggtgagctc gtcgtccgga ttgccagtct ggaagtggag aaccagagtc tgcgtggcgt 780
ggtacaggag ctgcagcagg ccatctccaa gctggaggcc cggctgaacg tgctggagaa 840
gagctcgcct ggccaccggg ccacggcccc acagacccag cacgtatctc ccatgcgcca 900
agtggagccc ccagccaaga agccagccac accagcagag gatgacgagg atgatgacat 960
tgacctgttt ggcagtgaca atgaggagga ggacaaggag gcggcacagt tgcgggagga 1020
gcggytamgg caktacgcgg agaagaaggc caagaagcyt gcaytggtgg ccaagtcctc 1080
catcctgctg gatttcaagc cttggggatg atgagacgga catggctcag ctggaggcct 1140
gtgtgcgctc tatccagctg gacggctggt ctgggggggct tccaagctgg tgccctgggc 1200
tacggttatc cggaagctaa caatttcatg tgtngttgga ggacgacaag tggggacaa 1260
cttgctggag gagganttca ccattttttna ggagcactgc aattttcaaa tcgcattttt 1320
caacanattt gaagcccg                                                 1338
```

<210> 178
<211> 1614
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1213)
<223> n equals a,t,g, or c

<400> 178
```
tgcatgtggt acatcccttc ttcctcatcc tcttcatgta cttcarcggc tgctttactg 60
cctctaaagc tgagagcttg attccagggc ctgccctgct cctggtggca cccagtggcc 120
tgtactactg gtacctggtc accgagggcc agatcttcat cctcttcatc ttcaccttct 180
tcgccatgct ggccctcgtc ctgcaccaga agcgcaagcc ctcttcctgg acagcaacgg 240
cctcttcctc ttctcctcct tcgcactgac cctcttgctt gtggcgctct gggtcgcctg 300
gctgtggaat gaccctgttc tcaggaagaa gtacccgggt gtcatctacg tccctragcc 360
ctgggctttc tacacccttc acgtcagcag tcggcactga gtccctggca ccaggctctg 420
gcgctctgct gggtgggagg gtgggccatg gagggcatct gaatacagga gtaggggggg 480
tgtgggtgtg taaccagaga ccgagagcat gagtggggtg tgcctcgtgt gcgtggattc 540
gtgtgtgtgt gtgtgtcttg tatatgtgtg cgcagagtgc atcattttca gactctacta 600
tttccgtcaa gtttctgttt gatttggatc atctcaggat cggattctgt tttagagtgt 660
ttctgggcca ggatccgggc ccctgccctc ctctgcacct gaccacactc cctactcagg 720
gctagtctgt tcttcccgga catcttctgg tagccgtgca ggagagggct gggtggggca 780
gaggccagga ggggacctgg tgtgtcacct gcccaccacc tggctcatcc ctcaggccca 840
ccctgaccct acattacata ggttacgtca gcctactgtg gctgttgagc aaagcatttc 900
tcctttctgg gcctcatttg cactagatgg gcctgtggtc ccaaagtagg tcagtaggtt 960
ggggttgctg acacccttg ggtgcagctt tgggacagat gagtggctct gtcctgtcac 1020
tgccctctcc ctgcctgggg ctatgtgca ctccagaccc ctgcccaggc tcaggccat 1080
gaggtatgga gacaccctgg cccccaggag ctggaggcac cgcccactcc cctggcattc 1140
cagctttgca ggtgaccctc ctctacccaa agctctgtcc ccctgctccc actccagaag 1200
```

134

```
aactgcggca cgngcttcgg gcagcctagc cacaggcttt gagcgcctgc attcctgggg 1260
gctggagggt ggggtgccaa aggccctgag caaaagccag agctcctctc atcaaagcct 1320
ttacaaggtg ctgggcccag aggctttgcc ttgacagagt ggcccagggt ttcaagggag 1380
gaggaacctc cccctaccta ggacccttcc tgtggggggt ctacagagtc agggacagaa 1440
gggaagggac ccacaggaag tcacagtggt gcccagggat gtgtcagccc ccagccacgg 1500
ggacgcggga ttcaagaatg aagtaaatac agtcacagcc ccaaaaaaaa aaaaaaaaaa 1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa        1614
```

<210> 179
<211> 4292
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (654)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (4288)
<223> n equals a,t,g, or c

<400> 179
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ggaaggtcca gaggggggcaa acctctttat ttaccacctt ccacaggaat ttggagacca 60
ggacattctg cagatgttca tgccttttgg aaatgttatc tctgctaaag tcttcattga 120
caaacagacc aatctgagca agtgctttgg ttttgttagc tacgacaatc cagtctctgc 180
acaagctgct atccaagcta tgaatggctt tcagatcggc atgaaacgct tgaaggtgca 240
gctgaagcgt tccaaaaacg acagcaaacc ttactgatcc taaccccaga ggctccctgc 300
tctcatttta gctttcttag gacatcttca tgcccgttag ttcatcgttt gcctagcatg 360
tccctgtggc gtctcaaaaa aaagtttcat cgtcccgtca ttgtttctga tgtctttctg 420
acctcacatc atatttggtt ctcctactga cctttgatct agtttgacct ttgaaatttg 480
catgtgacct catctagcta tgaattctgg gaagtcaatg tgaaaaacat tgctgcattc 540
atgcaagact gaaatttatt attagacaaa ttcattatag aaaaaacctg tggcaaaaac 600
gtttctttct tatttttttt cttttcctaa aacagacttg aaagtattat acangggatt 660
ggcattcttc ccggtcactg gtaacaatag caatatgtgt ccagggacac agaatgttgg 720
tttctaacag actacttcca aaaacagttt gagaaaaaaa ctgtctgatt ttaagtctct 780
agaggtctgt aatagttttt acatttttca ggcagtgtaa agttttttga taaggccatt 840
ttaggtggct cactttctca ttaagatata tatatagaac cacttttttgt agattagtat 900
aagaaaaata tttaccctgt tttggggcaa atgctaccta tttgtgtcac cttttgctga 960
actcacagtt agacaatcca tggtttaatg cacatgaaat tacctatatt ttatactgtt 1020
tcaatgtaca ggagaaaggt tactgtaaac tgtgttatgt tggtgcttct gtgaattaag 1080
ttgtggtttc atcatgagtc ttaatgttct ttgttgataa gacaagttta gaattggttt 1140
acttaataca aaaaaaaaaa aaagaatttc aaaaaaaaaa gttgtttgct taaaaaaaat 1200
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tacaaagttt gttaacttgc tatcctgtgg tcttgttgcc tgaaattgtt attgtttgtt 1560
atttctctct gatgtttttt gtaagacatt gtataagtgc ccatgtccca ctttttttaac 1620
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135

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cactccgcac atcagtgctg tgaaggcaac ctcaccatgt attttcttca taatctatgg 1680
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gattcagcac ctaacaatcc tgtatgcttt tgagatcacg tttagtgcta tgtcctagtc 2100
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aacagtcaaa cttattttg taatgtatgt tattgtgtga tgcagttttt tgcttctgtc 4200
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aaaaaaaaaa aaaaaaaaaa aaaaaaanaa aa                               4292
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<210> 180
<211> 243
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c


<400> 180
tcgacccacg cgtccggaga aggtgggctc tggggggtcc tctgtgggca gcggggatgc 60
cagctcctcr cgccatcacc. atcgccgccg ccggttccac ctrccccaac agcccctgct 120
ccagagggaa gtgtggtgtg tgggcacaac gggaaacgct aaccaggcac agagctcaac 180
ggagcagaca ctgctgaagc ccaagtgaga aaccacggcg ctttggcgtg taacntggaa 240
tat                                                               243


<210> 181
<211> 813
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (723)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (726)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (738)
<223> n equals a,t,g, or c


<400> 181
aattcggcag agaccaggtg tacctgagct acaataacgt ctcctccttg aagatgcttg 60
tggccaagga caactgggtg ctgtcctcgg agatcagtca ggtccgcctg tacactctgg 120
aggatgacaa gttcctctcc ttccacatgg agatggtggt gcatgtggat gcagmccagg 180
ccttcctgct gctctcggac ctgmgtcaga ggccagagtg ggacaagcac taccggagcg 240
tggagctagt gcagcaggta gacranggac gacgccatct accacgtcac cagmcctgmc 300
ctcggaggtc acacaaagcc ccaggacttc gtgatcctgg cctcgaggcg gaagccttgt 360
gacaatgggg accccctatgt catcgcgctg aggtcggtca cgctgcccac acaccgagag 420
acgccagagt acagacgcgg agagaccctc tgctcaggct tctgcctctg gcgcgagggg 480
gaccagctga ccaaggtagc ctgtagtaga ctcgggtcct gtccacagcc ctagctgcca 540
gcaatgctgt cctcacagag gcatagtcgc ccccagctgg gttgtgctcc actgtgacgg 600
tggcccgggg ggaggatgcc agcagcctgc ctatggytgc cagctgtgct gtgagcccag 660
cagcatggcc tgcatctggg aagggacaca ggttgtccag agcccctggc acaactgctg 720
agncanatgc tgtggagnca gctgttaccc tgtaagccac tggcccagca cctgcctaca 780
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137

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gggccagcct ggtggccaca gtgcacgtgg ggg                          813

<210> 182
<211> 822
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (567)
<223> n equals a,t,g, or c

<400> 182
ggttttacat gaccgcagtc gccctcagtt tcacccngta ggaatcggnc tggggatgca 60
ccgtgctact ctcttcctcc aggccggtcc ccggcgcgtg cgcgcgatcc atgtccatgt 120
ccgcgcctat caataaagtt gctcacttgt tgccggcccg ctagmccgaa aggttgcgcg 180
cgcagmccga gaagtctcgc gatagccagc cgcggctgcc cttgcgcttc ccgagctggc 240
ggggtccgtg gtgcgggatc gagattgcgg gctatggcgc cgaagttttt cgtcagtact 300
gggatatccc cgatggcacc gattgccacc gcaaagccta cagcaccacc agtattgcca 360
gcgtcgctgn cctgaccgcc gctgcctaca gagtcacact caatcctccg ggcaccttcc 420
ttgaaggagt ggctaaggtt ggacaataca cgttcactgc agctgctgtc ggggccgtgt 480
ttggcctcac cacctgcatc agcgcccatg tccgcgagaa gcccgacgac cccctgaact 540
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ttggcgccgc cgcctgcgtg tactttggca tagcggcctc cctggtcaag atgggccggc 660
tggagggctg ggaggtgttt gcaaaaccca aggtgtgagc cctgtgcctg ccgggacctc 720
cagcctgcag aatgcgtcca gaaataaatt ctgtgtctgt gtgtgaaaaa aaaaaaaaaa 780
aaaaaaaat yggggggggg cccskaacca attkccctta ag                 822

<210> 183
<211> 1095
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1082)
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138

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1094)
<223> n equals a,t,g, or c

<400> 183
gcgcggaggc ggcggcggag cctcctcctg ctgctgctgc gccccatccc cccgcggccg 60
gccagttcca gcccgcaccc cgcgtcggtg cccgcgcccc tccccgggcc ccgccatggg 120
cctcaccgtg tccgcgctct tttcgcggat cttcgggaag aagcagatgc ggattctcat 180
ggttggcttg gatgcggctg gcaagaccac aatcctgtac aaactgaagt tggggagat 240
tgtcaccacc atcccaacca taggcttcaa tgtagaaaca gtggaatata agaacatctg 300
tttcacagtc tgggacgtgg gaggccagga caagattcgg cctctgtggc ggcactactt 360
ccagaacact cagggcctca tctttgtggt ggacagtaat gaccgggagc gggtccaaga 420
atctgctgat gaactccaga agatgctgca ggaggacgag ctgcgggatg cagtgctgct 480
ggtatttgcc aacaagcagg acatgcccaa cgccatgccc gtgagcgagc tgactgacaa 540
gctggggcta cagcacttac gcagccgcac gtggtatgtc caggccacct gtgccaccca 600
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tcccggactc ctcaggcagt gccctttcct cccactttc ctcccccata gccacaggcc 780
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tgtactctag gggccaggtt gggaggggga aggtgagggc ttcgggtggt gctataatgt 1020
ggcactggat cttgagtaat aaatttgctg tggtttgtaa aaaaaaaaa aaaaaccccc 1080
gnggggggcc ccgna   1095

<210> 184
<211> 3675
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2204)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3329)
<223> n equals a,t,g, or c

<400> 184
gcgagaaccg cctggagagc ctgcccccgc agatgcgccg cctggtgcac ctgcagacgc 60
tcgtgctcaa tggaaacccc ctgctgcatg cacagctccg gcagctccca gcgatgacgg 120
ccctgcagac cctgcacctg cggagaccca gcgcacccag agcaacctgc ccaccagcct 180
ggagggtctg agcaacctcg cagacgtgga tctgtcctgc aatgacctga cacgggtgcc 240
cgagtgtctg tacaccctcc ccagcctgcg ccgcctcaac ctcagcagca accagatcac 300
ggagctgtcc ctgtgcatag accagtgggt gcacgtggaa actctgaacc tgtcccgaaa 360
tcagctcacc tcactgccct cagccatttg caagctgagc aagctgaaga agctgtacct 420

139

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gaattccaac aagctggact ttgacgggct gccctcaggc attggcaagc tcaccaacct 480
ggaagagttc atggctgcca acaacaacct ggagctggtc cctgaaagtc tctgcaggtg 540
cccaaagctg aggaaacttg tcctgaacaa gaaccacctg gtgaccctcc cagaagccat 600
ccatttcctg acggagatcg aggtcctgga tgtgcgggag aaccccaacc tggtcatgcc 660
gcccaagccc gcagaccgtg ccgctgagtg gtacaacatc gacttctcgc tgcagaacca 720
gctgcggcta gcgggtgcct ctcctgctac cgtggctgca gctgcagctg cgggagtggg 780
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atgaccctga caggtgccct cagggtctg ggaaatccaa ctctctccac agtgtgagtg 3540
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gatctagaac tagtc                                                3675


<210> 185
<211> 1040
<212> DNA
<213> Homo sapiens


<400> 185
ggacagagcc tccactgagc tgctgcctgc ccgccacata cccagctgac atgggcaccg 60
caggagccat gcagctgtgc tgggtgatcc tgggcttcct cctgttccga ggccacaact 120
cccagcccac aatgacccag acctctagct ctcagggagg ccttggcggt ctaagtctga 180
ccacagagcc agtttcttcc aacccaggat acatcccttc ctcagaggct aacaggccaa 240
gccatctrtc cagcactggt accccaggcg caggtgtccc cagcagtgga agagacggag 300
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catttggtgt tatcagcttc attgtcatcc tggtggttgt ggtgatcatc ctagttggtg 480
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gtggattgat actttctact ttgcattaaa attattttct agcctgcaaa aaaaaaaaaa 1020
aaaaaaaaaa aaaactcga                                            1040


<210> 186
<211> 817
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c


<220>
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141

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<221> misc feature
<222> (76)
<223> n equals a,t,g, or c

<400> 186
ancagctata gatcatgaca ggcaanggta nactgacagt acggtcggat tcccgggtcs 60
acccacgcgt ccgcangagc ggccgggtgg cgggaggaac cgttacggga actgaagttg 120
cggattaagc ctgatcaaga tgacaacctc ccaaaagcac cgagacttcg tggcagagcc 180
catggggggag aagccagtgg ggagcctggc tgggattggt gaagtcctgg gcaagaagct 240
ggaggaaagg ggttttgaca aggcctatgt tgtccttggc cagtttctgg tgctaaagaa 300
agatgaagac ctcttccggg aatggctgaa agacacttgt ggcgccaacg ccaagcagtc 360
ccgggactgc ttcggatgcc ttcgagagtg gtgcgacgcc ttcttgtgat gctctctggg 420
aagctctcaa tccccagccc tcatccagag tttgcagccg agtagggact cctcccctgt 480
cctctacgaa ggaaaagatt gctattgtcg tactcacctc cgacgtactc cggggtcttt 540
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ccccgtcctt tttcccttgc cagttccctg gtgacagtta ccagctttcc tgaatggatt 660
cccggcccca tccctcaccc ccaccctcac tttcaatccg tttgatacca tttggctcct 720
tttttggcag aacagtcact gtccttgtaa agttttttag atcaataaag tcagtggctt 780
tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                           817

<210> 187
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 187
ctgccctgct gctggaacac cgagccagcc tgagcgctaa ggaccaagac ggctgggagc 60
gctgcacgcc gcggctactg gggccaggtg cctggtggag ctgctcgtgg cgcacggggc 120
cgacctgaac gcaaagtccc tgatggacga gacgccccctt gatgtgtgcg gggacgagga 180
ggtgcgggcc aagctgctgg agctgaagca caagcacgac gccctcctgc gcgcccagag 240
ccgccagcgc tccttgctgc gccgccgcac ctccagcgcc ggcagccgcr ggaaggtggt 300
gaggcgggtg agcctaaccc agcgcaccga cctgtaccgc aagcagcacg cccaggaggc 360
catcgtgtgg caacagccgc cgcccaccag cccggagccg cccgaggaca acgatgaccg 420
ccagacaggc gcagagctca ggccgccgcc cccggargag gacaaccccg aagtggtcag 480
gccgcacaat ggccgagtag ggggctcccc agtgcggcat ctatactcca agcgactaga 540
ccggagtgtc tcctaccagc tgagcccct ggacagcacc accccccaca ccctggtcca 600
cgacaaggcc caccacaccc tggctgacct gaagcgccag cgagctgctg ccaagctgca 660
gcgaccccca cctgaggggc ccgagagccc tgagacagct gagcctggcc tgcctggtga 720
cacggtgacc ccccagcctg actgtggctt cagggcaggc ggggacccac ccctgctcaa 780
gctcacagcc ccggcggtgg aggctcccgt ggagaggagg ccgtgctgcc tgctcatgtg 840
aggctgttgc tcagcatgca ggggccctgt cgcgggcaca gcccaaggct gcctccccac 900
ggtgcgtgcc ctggtgctgc gggtgcagca cggaaacccc ggcttctact gtacaggaca 960
ctggcccctc tcaggtcaga agacatgcct ggaggatgt ctggctgcaa agactatttt 1020
tatcctgcaa ctcttgataa agggctgttt tgccatggaa aaaaaaaaaa aaaaaaaaaa 1080

<210> 188
<211> 1286
<212> DNA
<213> Homo sapiens

<220>
```

```
<221> misc feature
<222> (1245)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1254)
<223> n equals a,t,g, or c


<400> 188
gcatgattct tgttttgtag agatgcaggc tcaaaaagta atgcatgttt cttcagcaga 60
actgaattat tcactgccat atgactctaa acaccaaata cgtaatgcct ctaatgtaaa 120
gcaccatgac tctagtgctc ttggtgtata ttcttacata cctttagtgg aaaatcctta 180
tttttcatca tggcctccaa gtggtaccag ttctaagatg tctcttgatt tacctgagaa 240
gcaagatgga actgtttttc cttcttctct gktgccaaca tcctctacat ccctcttctc 300
ttattacaat tcacatgatt ctttatcact gaattctcca accaatattt cctcactatt 360
gaaccaggag tcagctgtac tagcaactgc tccaggata gatgatgaaa tcccccctcc 420
acttcctgta cggacacctg aatcatttat tgtggttgag gaagctggag aattctcacc 480
aaatgttccc aaatccttat cctcagctgt gaaggtaaaa attggaacat cactggaatg 540
gggtggaaca tctgaaccaa agaaatttga tgactctgtg atacttagac caagcaagag 600
tgtaaaactc cgaagtccta aatcagaact acatcaagat cgttcttctc ccccacctcc 660
tctcccagaa agaactctag agtccttctt tcttgccgat gaagattgta tgcaggccca 720
atctatagaa acatattcta ctagctatcc tgacaccatg gaaaattcaa catcttcaaa 780
acagacactg aagactcctg gaaaaagttt cacaaggagt aagagtttga aaattttgcg 840
aaacatgaaa aagartatct gtaattcttg cccaccaaac aagcctgcag aatctgttca 900
gtcaaataac tccagctcat ttctgaattt tggttttgca aaccgttttt caaaacccaa 960
aggrccaagg aatccaccac caacttggaa tatttaataa aactccagat ttataataat 1020
atgggctgca agtacacctg caaataaaac tactagaata ctgctagtta aaataagtgc 1080
tctatatgca taatatcaaa tatgaagata tgctaatgtg ttaatagctt ttaaaagaaa 1140
agcaaaatgc caataagtgc cagttttgca ttttcatatc atttgcattg agttgaaaac 1200
tgcaaataaa agtttgtcac ttgagcttat gtacagaatg ctatntgggg aacncttta 1260
ggatgggttt tattttttcca tttttg                                     1286


<210> 189
<211> 1738
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1480)
<223> n equals a,t,g, or c


<400> 189
gcggcgccct cggagccaaa ggcgcgcggc ggacacggcg gggccctcgc gcgcctggag 60
acgatgccaa agctgcaggg cttcgagttc tggagccgca ccctgcgagg ggcccgccac 120
gtcgtggccc ccatggtgga ccagagcgag ctggcctgga ggctgctgag ccggcgccac 180
ggggcacagc tctgctacac gcccatgctg catgcccagg tctttgtccg cracgccaac 240
taccggaagg agaacctgta ctgcgaggtg tgccccgagg accggcccct catcgtgcag 300
ttctgtgcca atgacccgga ggtgtttgtt caggcggctc tcctggctca ggattactgt 360
gacgccattg acctgaactt gggctgccca cagatgatag ccaagagagg tcactatggc 420
```

143

```
gcctttctgc aggacgagtg ggacctgctc caaagaatga ttttgctggc ccacgagaaa 480
ctctctgttc ctgtcacgtg caaaatccgt gtcttcccgg agattgacaa gaccgtgagt 540
acgcccagat gctggagaag gccggctgcc agttgctgac ggtgcacgga cgcaccaagg 600
agcagaaggg gcccctgtcg ggtgcagcgt cctgggagca tatcaaggct gtgcggaagg 660
ctgtggccat ccctgtgttt gctaacggga acatccagtg cctgcaggac gtggagcgct 720
gcctccggga cacgggtgtg cagggcgtca tgagcgcaga gggcaacctg cacaaccccg 780
ccctgttcga gggccggagc cctgccgtgt gggagctggc cgaggagtat ctggacatcg 840
tgcgggagca cccctgcccc ctgtcctacg tccgggccca cctcttcaag ctgtggcacc 900
acacgctgca ggtgcaccag gagctgcgag aggagctggc caaggtgaag accctggagg 960
gcatcgctgc tgtgagccag gagctgaagc tgcggtgtca ggaggagata tccaggcagg 1020
agggagcgaa gcccaccggc gacttgccct tccactggat ctgccagccc tacatccggc 1080
cggggcccag ggagggagc aaggagaagg caggtgcgcg cascaagcgg gccctggagg 1140
aagaggaggg tggcacggag gtcctgtcca agaacaagca aaagaagcag ctgaggaacc 1200
cccacaagac cttcgacccc tctctgaagc caaaatatgc aaagtgtgac cagtgtggaa 1260
acccaaaggg caacagatgt gtgttcagcc tgtgccgcgg ctgctgcaag aagcgagcct 1320
ccaaagagac tgcagactgc ccaggtcacg gattgctttt taaaaccaaa ttggagaagt 1380
ctctggcctg gaaagaggcc cagcctgagc tgcaggagcc tcagccagca gcacctggaa 1440
caccaggtgg cttctccgaa gtcatgggca gtgccctggn ctgaaggccc acaacccca 1500
cccccaggac tgctgctgga gcctggacac gtcctactta agaaaatgcc ttttactcag 1560
ggaatctcct gctacttaat gtggaaagac acgcccatgt ccccccttcgc ccactctggg 1620
ggcctggaaa tgctgcagtg gggagcaggc cccaggctgg acctgccctg tcctcagcac 1680
gcgtgtgcaa aagtgaacaa taaatcattt caaagatgaa aaaamaaaaa aaaaaaaa  1738
```

<210> 190
<211> 1923
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1829)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1875)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1910)
<223> n equals a,t,g, or c

<400> 190
```
agcacatcaa atgcccccac tccaagtacg ggtgcacgtt catcgggaac caggacactt 60
acgagaccca cctggagact tgccgcttcg agggcctgaa ggagtttctg cagcagacgg 120
atgaccgctt ccacgagatg cacgtggctc tggcccagaa ggaccaggag atcgccttcc 180
tgcgctccat gctgggaaag ctctcggaga agatcgacca gctagagaag agcctggagc 240
tcaagtttga cgtcctggac gaaaaccaga gcaagctcag cgaggacctc atggagttcc 300
ggcgggacgc atccatgtta aatgacgagc tgtcccacat caacgcgcgg ctgaacatgg 360
gcatcctagg ctcctacgac cctcagcaga tcttcaagtg caaagggacc tttgtgggcc 420
```

144

```
accagggccc tgtgtggtgt ctctgcgtct actccatggg tgacctgctc ttcagtggct 480
cctctgacaa gaccatcaag gtgtgggaca catgtaccac ctacaagtgt cagaagacac 540
tggagggcca tgatggcatc gtgctggctc tctgcatcca ggggtgcaaa ctctacagcg 600
gctctgcaga ctgcaccatc attgtgtggg acatccagaa cctgcagaag gtgaacacca 660
tccgggccca tgacaacccg gtgtgcacgc tggtctcctc acacaacgtg ctcttcagcg 720
gctccctgaa ggccatcaag gtctgggaca tcgtgggcac tgagctgaag ttgaagaagg 780
agctcacagg cctcaaccac tgggtgcggg ccctggtggc tgcccagagc tacctgtaca 840
gcggctccta ccagacaatc aagatctggg acatccgaac ccttgactgc atccacgtcc 900
tgcagacgtc tggtggcagc gtctactcca ttgctgtgac aaatcaccac attgtctgtg 960
gcacctacga gaacctcatc cacgtgtggg acattgagtc caaggagcag gtgcggaccc 1020
tcacgggcca cgtgggcacc gtgtatgccc tggcggtcat ctcgacgcca gaccagacca 1080
aagtcttcag tgcatcctac gaccggtccc tcagggtctg gagtatggac aacatgatct 1140
gcacgcagac cctgctgcgt caccagggca gtgtcaccgc gctggctgtg tcccggggcc 1200
gactcttctc aggggctgtg gatagcactg tgaaggtttg gacttgctaa caggatccag 1260
gccaggctgt ggtttcccct gaaccagccc tggacctttc tgagccaggc tggccacatg 1320
gggtggtctc ggggtttctg cctgccccgt gggcataggt ggacaggctc tggcagccgg 1380
gcagtgccct ccccgtccca tgctcggcga gcctccctct actcggcact gtccttgctg 1440
cccagcccct ctctgggtgc caggtacgac gcttgccccg gcccaccctc catccccacc 1500
ctccatcccc accctagatg gagcgagggc cttttactc accttttcta ccgttttag 1560
actgtatgta gatttggtta cctcctggtt gaaataaatg ctccacagac tgtggctgtg 1620
agtggggaca gctcctcggg acaaggggc tgtgtgtggc cttgaggttg gtgtgcacag 1680
gcactggctg ctgtgagtgg gggggcatgg ggcagtttcc tttggtggac cccaggaytt 1740
cggsccamtc cggggsctcc cctccctgct aggaggcaca ccctcagagg agctgcaagc 1800
ccgtggctgc ctgctacatg ccctgcttnc acgtggctgc acgctgacac acccacattc 1860
accaaaccca cccgngccct gggacgcaac cacgccagga ggaggacacn ggccgccgag 1920
agc                                                                   1923
```

<210> 191
<211> 250
<212> DNA
<213> Homo sapiens

<400> 191
```
ccaagtgtgt tgatacatta agctatgaga catctaaaat aatgaaactt ggaacttagt 60
ggaacatgta catgttttca gcatacttaa acccaaaaat cattaatttt cagaacttaa 120
tcagtgcttt tacatttgtt ttttctttta tgctagttgg aaatggagga tgaaratacaa 180
attgrtgtgt tccaacagca dacgggrggt gtctactgaa aagggaacct gcttctttac 240
tccagaactc                                                          250
```

<210> 192
<211> 1902
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature

```
<222> (8)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (763)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1898)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1900)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1901)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1902)
<223> n equals a,t,g, or c

<400> 192
ngggacgntg gtagaccanc gcgtaccgct gagtcaratt ttggcatcaa cttgaagggc 60
ccaaaaatca aaggaggtgc ggatgtttca gggggtgtca gtgccccara catcagcctt 120
ggtgaagggc atttragtgt taaaggttcc gggggtgagt ggaagggacc ccaagtctcc 180
tctgctctca acttggacac atctaagttt gctgggggcc ttcatttctc aggaccaaag 240
gtggaaggag gtgtgaaagg aggtcagatt ggactccagg ctcctgggct gagtgtgtct 300
gggcctcaag gtcacttgga aagtggatct ggaaaagtaa cattccctaa aatgaagatc 360
cccaaattta ccttctctgg ccgtgagctg gttggcagag aaatgggggt ggatgttcac 420
ttccctaaag cagaggccag catccaagct ggtgctggag acggcgagtg ggaagagtct 480
gaagtcaaac tgaaaaagtc caagatcaaa atgcccaagt ttaatttttc caaacctaaa 540
gggaaaggtg gtgtcactgg ctcaccagaa gcatcaattt ctgggtccaa aggtgacctg 600
aaaagttcaa aggccagcct gggctctctg gaaggagagg cagaggccga agcctcttca 660
ccgaaaggca aattctcctt atttaaaagt aagaagccac ggcaccgctg caaattcatt 720
cagtgatgaa agagagttct ctggaccttc caccccgacg ggnacgctgg agtttgaagg 780
tggggaagtg tctctggaag gtgggaaagt taaagggaaa cacgggaagc tgaaattcgg 840
tacctttggt ggattggggt caaagagcaa aggtcattat gaggtgactg ggagcgatga 900
tgagacaggc aagttacagg ggagtggggt gtccctggcc tctaagaagt cccgactgtc 960
ctcctcttct agcaatgaca gtgggaataa ggttggcatc cagcttcccg aggtggagct 1020
```

```
gtcagtttcc acaaagaaag agtagcaggc ctttgtatgt gtgtacatat atatatatat 1080
aacaaaacat cagccttggg tggtgtgttc ctatataaac tccaaaggga aacacaccga 1140
ctgcctcagc aatcatgcaa agaccttgcc tggcccggtg gcaagcgctg aaaaaccgac 1200
cgcctgtagg ctcctggaac tatacagata ggtaaagagt tccaagttcg tccagcccat 1260
gtgcaaagtc aacagtattt gccttaagat ttcatatata tatatttttt tgcattgact 1320
gctgagagct cctgtttact aagcaagctt ttgtgtttat tatcctcatt tttactgaac 1380
attgttagtt ttggggtaat ggaaacccac tttttcattg taatgacttt ggggctttt 1440
gttagtaagg gtgggtgggg tgatgggttg cagacggagg tcaggtcttc ctctttcctg 1500
agactggatc tgttcaaaca gcaaacgccc acagatggcc cagaggtggt ggtagtcagg 1560
gtgtgtgggt gttttaggg ttctttagtg ttgtttcttt cacccagggg tggtggtccc 1620
agccagtttg gtgctgacgg tgagaggaaa ttagaatctg tttgcaaatt gtccaaccca 1680
cccctcaac atgagggct tccattttct gtgttttgta agggaactgt ttccttcatg 1740
ccgccatgtt cctgatatta gttctgattt ctttttaaca aatgttatca tgattaagaa 1800
aatttccagc actttaatgg ccaattaact gagaatgtaa gaaaattgaw gctgtacaag 1860
gcaaataaag ckgttattaa cctgaaaaaa aaaaaaanan nn                   1902
```

<210> 193
<211> 560
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (528)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (535)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (559)
<223> n equals a,t,g, or c

<400> 193
```
ttttgcttaa agctatttan gtgacactat agaaggtacg cctgcaggta ccggtccgga 60
attcccgggt cgacccacgc gtccggggtt gcagacggag gtcaggtctt cctctttcct 120
gagactggat ctgttcaaac agcaaacgcc cacagatggc ccagaggtgg tggtagtcag 180
ggtgtgtggg tgttttttagg gttctttagt gttgtttctt tcacccaggg gtggtggtcc 240
cagccagttt ggtgctgacg gtgagaggaa attagaatct gtttgcaaat tgtccaaccc 300
acccctcaa catgagggc ttccattttc tgtgttttgt aagggaactg tttccttcat 360
gccgccatgt tcctgatatt agttctgatt tctttttaac aaatgttatc atgattaaga 420
aaatttccag cactttaatg gccaattaac tgagaatgta agaaaattga tgctgtacaa 480
ggcaaataaa gctgtttatt aaccttgaaa aaaaaaaaa aaagggnggg cccgncccat 540
```

147

```
tgccctaggg ggggttaant                                      560

<210> 194
<211> 590
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (589)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (590)
<223> n equals a,t,g, or c

<400> 194
ctgcaggtac cggtccggaa ttccgggtcg cccacgcgtc aggcggcggc gatgaccttc 60
tgccggctgc tgaaccggtg tggcgaggcg gcgcggagcc tgcccctggg cgccaggtgt 120
ttcggggtgc gggtctcgcc gaccggggag aaggtcacgc acactggcca ggtttatgat 180
gataaagact acaggagaat tcggtttgta ggtcgtcaga aagaggtgaa tgaaaacttt 240
gccattgatt tgatagcaga gcagcccgtg agcgaggtgg agactcgggt gatagcgtgc 300
gatggcggcg ggggagctct tggccaccca aaagtgtata taaacttgga caaagaaaca 360
aaaaccggca catgcggtta ctgtgggctc cagttcagac agcaccacca ctagagcgtg 420
tggcacgccg ggggtcccgc agcatcctgt gagcatttcc gcggggaagc tgagcacgtg 480
aagctcgctg gttctgtgcg aagggtattc ctggtgctga ataaagggtg ttgctgtcaa 540
gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaann       590

<210> 195
<211> 691
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (579)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (618)
<223> n equals a,t,g, or c

<220>
<221> misc feature
```

```
<222> (639)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (657)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (672)
<223> n equals a,t,g, or c


<400> 195
attggcatcn tctgaaagcg ttttagacag gcagaatctc tggtctcccc tctctgcatt 60
ccccacccag tgaatgaatg agaatctgca tttcttgaga tcataagaat actgacatac 120
agatgagata aaactcatgt gaatatcagt tttaaggctg gtggttcatt tgttttggtc 180
atattgagtc aggattgact aatgaactgt agaggttttg cattatgcaa atgctcttaa 240
tttcttgtat taggaattag acgctccccc ccaagtctta aataatgttt taatctgtat 300
ccttttatta taagaagatt agtaatattc tacagataat aacaacaact ggtatagtat 360
attttattta cattcttcat tcttaggaga aaatgctgag aagcttctgc agttcaagcg 420
ttggttctgg tcaatagtag agaagatgag catgacagaa cgacaagatc ttgkttactt 480
ttggacwtca agcccatcac tgccagccag tgaagaagga ttccagccta tgccctcaat 540
cacaatawga ccaccagatg accmacatct tcctactgna aaatacttgc atttcttgga 600
ctttaccttc ccactctntt cctttaaaca ggattcttna aaccggaaat tggttanctc 660
gccatttagg anccaaaaat tttgggtttt g                                 691


<210> 196
<211> 1772
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1749)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1769)
<223> n equals a,t,g, or c


<400> 196
gnataatgct ggccattttg cctttctgac atttccttgg gaatctgcaa gaacctcccc 60
tttcccttcc cmcaataaga ccatttaagt gtgtgytaaa caactacrga atactaaata 120
aaaagtttgg ccaaaaccaa ccatgaagct gcaaaggtgc ttgctcttac tstttcaaat 180
```

```
ttttgcaact ctartgtctc acttttaaag gaacagcttg attgcaaagg agaaaataga 240
taagcaatga akttatctcc aacttcctaa aggcttatga cttctaaaaa gtgaatctat 300
cagcattcca catcagattt aaagcatcaa atgcctgtga aacagcaaag atggttgaag 360
attgtgctca ttatgtttgt ggagtgctga ttgattcaca gtagataacg ctggcagtaa 420
gagaaatcaa atgctaagag ttgttgaagc agaaggcggc tgattgttgg taagtcagtg 480
cagttgcata agcagtgctg tcagaattgg tttggtgcag gcaatagatt ttgccttcaa 540
gggttcctgt ggatctcagg aaggcatcag tgttgattaa cactcataac tagggagtga 600
stggtagtta cttaagtaat tgaccaaatg gaaaggggga agtaattaag gaaattggta 660
agtggaggta gtcaggargt tctygtggty cttyacayag attttacagc tttggstttc 720
attttgttta gctaaagtca tggggacaac tcttcaattt agaacttaag ttgaattata 780
aaaatgatgg atataagtgg tagctgtatc tagtgaagtg tctgtcagta agtgaaacat 840
tttttggtgg tggcttatcc acaaacagtt tagttgtaga ataaaactta tgagtgacat 900
ctggaaagta accatgctaa gatggcaagc acactggaaa caattaggcc acttggcttt 960
cttttgctgt attgtttttat aagcctactt tacctcccag tcttggaaac aagtttttagt 1020
tttttattgg tttggagact agagccaata gtataatgtt ctcaaaggaa acagacttga 1080
gttgttggat tagaggaact aacccaactt atatgatttt tttttttgttt ttgtcgtgta 1140
gttatggcac tgtcttattt ggaacatttg caactaggga taatacaaca tttttaactc 1200
tcatttgaca acctactact aatcacagac cacaagggta atgaccaaat ttatgtggtt 1260
tttgcactcc atagttgtct tagcccaatc tttctatact cttacgatta cttgggttaa 1320
cgcytctgtg aggaccttct ggctcttgag ataccctaaa tatttaagat atttagatat 1380
cttgaagata gtataggata tagagattgt accaaatagg aatataagga gtatgttaaa 1440
atgaccagat acctgtttga tagtttactg acctagcaga tgtgtggaaa aggaatcaga 1500
tcttgattct tctgggttta tactggttgt aaaacagaat gatacagaaa atgttttcct 1560
tgtttaactg gtagttgaac atagaacttg ggtattatag atcacttttc acttttttgga 1620
atgttttgta ttgaaactta ataaaacttt aacatggcaa aaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaagana aaaaaaaaag ggggggccnc cc                           1772
```

<210> 197
<211> 675
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (657)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (671)
<223> n equals a,t,g, or c

<400> 197
```
acccacgcgt ccggacttcc tcttcgttaa gtcggccttc ccaacatggc gcagtctatt 60
aacatcacgg agctgaatct gccgcagcta gaaatgctca agaaccagct ggaccaggaa 120
gtggagttct tgtccacgtc cattgctcag ctcaaagtgg tacagaccaa gtatgtggaa 180
gccaaggact gtctgaacgt gctgaacaag agcaacgagg ggaaagaatt actcgtccca 240
ctgacgagtt ctatgtatgt ccctgggaag ctgcatgatg tggaacacgt gctcatcgat 300
gtgggaactg ggtactatgt agagaagaca gctgaggatg ccaaggactt cttcaagagg 360
aagatagatt ttctaaccaa gcagatggag aaaatccaac cagctcttca ggagaagcac 420
```

150

```
gccatgaaac aggccgtcat ggaaatgatg agtcagaaga ttcagcagct cacagccctg 480
ggggcagctc aggctactgc taaggcctga gagtttttgc agaaatgggg cagagggaca 540
ccctttgggc gtggcttcct ggtgatggga agggtcttgt gttttaatgc caataaatgt 600
gccagctggg caraaaaaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaa aacccccnggg 660
gggggcccgg naccc                                                 675
```

<210> 198
<211> 557
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (461)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (464)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (488)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (492)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (495)
<223> n equals a,t,g, or c

<400> 198
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tttaggtgac acgtatagaa ggtcgcctgc aggtaccggw ccggaattcc gggtcgaccc 60
acgcgtccgg gaacacaaga tgccgaaggg aagaaggcga aggggaagaa ggtggccccg 120
gcccccgccg tcgtgaagaa gcaggaggcc aagaaggtgg tcaacccgct gttcgagaag 180
cggcccaaga acttcggcat cggtcaggac atccagccca agcgggacct gacgcgcttc 240
gtcaagtggc cgcgctacat ccggctgcag cggcacgcgc gatcctctac aagcggctga 300
aggtgccgcc cgccatcaac cagttcacgc aggcgctgga ccgccagacg gccacgcagc 360
ttgcttgaag ctggcgcaca attaccggcc cgagacgaag caggagaaga agcagcggtt 420
gttggcccgg gcggagaaga aarcggccgg ncaaggggga nttnccgaac aagcggsccc 480
cgttgttntc gnaancgggg ttgaaaacgg ttcaacaagt tggttggaga acaagaaggc 540
```

```
gccattggtt cgttatt                                                  557

<210> 199
<211> 2611
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2549)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2560)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2585)
<223> n equals a,t,g, or c

<400> 199
tcncgggtcg acccacgcgt ccggcgagga gtaccttacc aacttggccc acatggacat 60
cgacaaggac tggaggcccc gctgtacctc accccgagg gctggtccct cttcctccag 120
cgctactacc aagtggtcca cgaagggca gaactcaggc acctcgacac tcaggtccag 180
cgctgtgagg acatcctgca gcagctgcag gccgtggtac cccagataga catggaaggg 240
gatcgcaaca tctggatcgt gaagccagga gccaagtccc gcggacgagg catcatgtgc 300
atggaccacc tggaggagat gctgaagctg gtgaacggca acccgtggt gatgaaggac 360
ggcaagtggg tggtgcagaa gtatattgag cggcccctcc tcatctttgg caccaagttt 420
gacctcagac agtggttcct ggtaactgac tggaacccac ttaccgtgtg gttctaccgc 480
gacagctata tccgctttc cacgcagccc ttctccctga agaacctgga caactcagtg 540
cacctgtgca acaactccat ccagaagcac ctggagaact catgccatcg gcatccactg 600
cttccgccag acaacatgtg gtctagccag aggttccagg cccacctgca ggagatgggt 660
gccccaaatg cttggtccac catcatcgtg cctggcatga aggatgctgt gatccacgca 720
cttcagacct cccaggacac cgtgcaatgt cggaaggcca gctttgagct ctatggcgct 780
gacttcgtgt tcggggagga cttccagccc tggctgattg agatcaacgc cagccccacg 840
atggcaccct ccacagcagt cactgcccgg ctctgtgctg gcgtgcaagc tgacaccctg 900
cgcgtggtca ttgaccggak gctggaccgc aactgtgaca caggagcctt tgagctcatc 960
tataagcagc ctgctgtgga ggtgcctcaa tatgtgggca tccggctcct ggtagagggc 1020
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ctctgctgac ccagcgaggc tctggggaag gcaaggactc ggggacccct acccacaggt 1140
cagcttctag gaaaggcact ggggccagga gcctggggca cagtgagaag ccagtctcca 1200
ctgccaccac ttcagccccc ggaaagggga agaaagccga ggtatcagga agtttaagga 1260
agttgcccaa ggttgcacag ctcagaaggg gcacagctgg gatgcagacc cagcccgtca 1320
ccacttcccc agcctccaca ccaaggccca gctgccttct ccccatgtac tccgacacca 1380
```

152

```
gggccaggtc ctcagacgac agcacagcaa gctggtgggc actaaggccc tgtcgaccac 1440
aggcaaggcc ttgaggactc tacccacggc taaggtcttc atttccctcc caccgaacct 1500
tgatttcaag gtggcaccca gcatcctgaa gccaagaaag gtgggcctcg acctgtgact 1560
cacacccagt ggacagtgct gagcacgggg tcagggctgg agggcacagg cagagggcag 1620
ctcccaggct ggctggcacc ccaagggaag agctggtctc cctcagaagc cccttcctcc 1680
acagacttct gatcatctcc ctcttctccc ctcctttcac accgaggctc ctgctctcct 1740
gtgcctccga ggcccccagc tggaagtgcc ttgttgcctc tgccctttga agtcggaaca 1800
attcctagca cctgtcggaa ggtcaaggcc aaaggcaaat tcaaggccag actgtgacaa 1860
acccagggct gaggcctgcc ccatgaagag gctgagcccc ctgaaacccc tgccccttgt 1920
tggtacattc cagaggcgca gggggcctggg ggatatgaag ctagggaagc ccctgcttcg 1980
attccccact gcccttgtcc tggatccaac accaaataaa aagaaacaag tgaagtattt 2040
ggggcttgac tccattgctg ttggaggktc aagagtggat ggggcgaggc cgtgtaccco 2100
agggtccaca gcaagagcct gaggccatca gcagytcytc cgtgcagmga ggcccagaat 2160
tcccacctaa ggacagacat ggggcttcct atttagggac tcccccagca tctccgatcc 2220
aggggtgggg agcgtgacct tcactttaca gatgaagaaa ctgagtctga aagaggaggc 2280
atggcttacc caagatcacg tggcagtgag tcgacgcagg gacatattgc cagaactgcc 2340
gagcactggg agcccccaa ccccagagaa caagccaagc tagcagaatg acacctaccg 2400
ggcataggaa cgttaatgcc atgagacaag ggaaggattk gcttgctaaa mctcagccct 2460
tytgcagaag gcatkggtct atcccttctt cagcaaaggg gcaaggtcac taaaaatgaa 2520
catccataag ccacaaccac tggagaaant tttgcactgn ttagtgtagt tggttgaatg 2580
tgggnccccg gaaagagatg ttacttggac c                               2611
```

<210> 200
<211> 2316
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2280)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2282)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2302)
<223> n equals a,t,g, or c

<400> 200
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ggcacgagga aacatggagt cctgtaggca aggtcttacc tgaatcagga tgagggagtg 60
gtgggtccag gtggggctgc tggccgtgcc cctgcttgct gcgtacctgc acatcccacc 120
ccctcagctc tcccctgccc ttcactcatg gaagtcttca ggcaagtttt tcacttacaa 180
gggactgcgt atcttctacc aagactctgt gggtgtggtt ggaagtccag agatagttgt 240
gcttttacac ggttttccaa catccagcta cgactggtac aagatttggg aaggtctgac 300
cttgaggttt catcgggtga ttgcccttga tttcttaggc tttggcttca gtgacaaacc 360
gagaccacat cactattcca tatttgagca ggccagcatc gtggaagcgc ttttgcggca 420
tctggggctc cagaaccgca ggatcaacct tctttctcat gactatggag atattgttgc 480
```

153

```
tcaggagctt ctctacaggt acaagcagaa tcgatctggt cggcttacca taaagagtct 540
ctgtctgtca aatggaggta tctttcctga gactcaccgt ccactccttc tccaaaagct 600
actcaaagat ggaggtgtgc tgtcacccat cctcacacga ctgatgaact tctttgtatt 660
ctctcgaggt ctcacccag tctttgggcc gtatactcgg ccctctgaga gtgagctgtg 720
ggacatgtgg gcagggatcc gcaacaatga cgggaactta gtcattgaca gtctcttaca 780
gtacatcaat cagaggaaga agttcagaag gcgctgggtg ggagctcttg cctctgtaac 840
tatccccatt catttttatct atgggccatt ggatcctgta aatccctatc cagagttttt 900
ggagctgtac aggaaaacgc tgccgcggtc cacagtgtcg attctggatg accacattag 960
ccactatcca cagctagagg atcccatggg cttcttgaat gcatatatgg gcttcatcaa 1020
ctccttctga gctggaaaga gtagcttccc tgtattacct cccctactcc cttatstgtt 1080
gtgtattcca cttaggaaga aatgcccaaa agaggtcctg gccatcaaac ataattctct 1140
cacaaagtcc actttactca aattggtgaa cagtgtatag gaagaagcca gcaggagctc 1200
tgactaaggt tgacataata gtccacctcc cattactttg atatctgatc aaatgtatag 1260
acttggcttt gttttttgtg ctattaggaa attctgatga gcattactat tcactgatgc 1320
agaaagacgt tcttttgcat aaaagacttt ttttaacact ttggacttct ctgaaatatt 1380
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gggggctcct tccctctcct cgaatgacgt tatgggcaca tgccttttaa aagttcttta 1500
agcaacacag agctgagtcc tctttgtcat acctttggat ttagtgtttc atcagctgtt 1560
tttagttata aacattttgt taaaatagat attggtttaa atgatacagt attttaggta 1620
tgatttaaga ctatgattta cctatacatt atatatattt tataaagata ctaaaccagc 1680
ataccttac tctgccagag tagtgaagct aattaaacac gtttggtttc tgaataaatt 1740
gaactaaatc caaactattt cctaaaatca caggacatta aggaccaata gcatctgtgc 1800
cagagatgta ctgttattag ctgggaagac caattctaac agcaaataac agtctgagac 1860
tcctcatacc tcagtggtta gaagcatgtc tctcttgagc tacagtagag gggaagggat 1920
tgttgtgtag tcaagtcacc atgctgaatg tacactgatt cctttatgat gactgcttaa 1980
ctccccactg cctgtcccag agaggctttc caatgtagct cagtaattcc tgttacttta 2040
cagacaggaa agttccagaa actttaagaa caaactctga aagacctatg agcaaatggt 2100
gctgaatact ttttttttaa agccacattt cattgtctta gtcaaagcag gattattaag 2160
tgattattta aaattcgttt ttttaaatta gcaacttcaa gtataacaac tttgaaactg 2220
gaataagtgt ttattttcta ttaataaaaa tgaattgtga caaaaaaaaa aaaagggccn 2280
gncccgtttt aaaagggatc cnaagcttta ccgtac                            2316
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<210> 201
<211> 1147
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

154

<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1145)
<223> n equals a,t,g, or c

<400> 201
cgcannccac nnggtggang ccgctctaga atatggatcc cccgggactg cagggagtcc 60
aaggtacagt cgccgcgtgc ggagcttgtt actggttact tggcctcatg gcggtccgag 120
cttcgttcga gaacaactgt gagatcggct gctttgccaa gctcaccaac acctactgtc 180
tggtagcgat cggaggctca gagaacttct acagtgtgtt cgagggcgag ctctccgata 240
ccatccccgt ggtgcacgcg tctatcgccg gctgccgcat catcgggcgc atgtgtgtgg 300
ggaacaggca cggtctcctg gtacccaaca ataccaccga ccaggagctg caacacattc 360
gcaacagcct cccagacaca gtgcagatta ggcgggtgga ggagcggctc tcagccttgg 420
gcaatgtcac cacctgcaat gactacgtgg ccttggtcca cccagacttg dacagggaga 480
cagaagaaat tctggcagat gtgctcaagg tggaagtctt cagacagaca gtggccgacc 540
aggtgctagt aggaagctac tgtgtcttca gcaatcaggg agggctggtg catcccaaga 600
cttcaattga agaccaggat gagctgtcct ctcttcttca agtcccccctt gtggcgggga 660
ctgtgaaccg aggcagtgag gtgattgctg ctgggatggt ggtgaatgac tggtgtgcct 720
tctgtggcct ggacacaacc agcacagagc tgtcagtggt ggagagtgtc ttcaagctga 780
atgaagccca gcctagcacc attgccacca gcatgcggga ttccctcatt gacagcctca 840
cctgagtcac cttccaagtt gttccatggg ctcctggctc tggactgtgg ccaaccttct 900
ccacattccg cccaatctgt accggatgct ggcagggagg tggcagagag ctcactggga 960
ctgagggggct gggcacccaa ccctttttcca cctgtgctta tcgcctggat ctatcattac 1020
tgcaaaaacc tgctctgttg tgctggctgg caggccctgt ggctgctggc tgagggttct 1080
gctgtcctgt gccacccat taaagtgcag ttccctccgg aaaaaaaaaa aaaaaaggg 1140
cggcnac   1147

<210> 202
<211> 688
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (477)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (684)

155

<223> n equals a,t,g, or c

<400> 202
acgtaccggt ccggtaattc ccgggtcgac ccacgcgtcc gctcggcggg cgctgttgag 60
ggagtcgggc cgcgactgtg gtcgttttta taccttcccg cgcggacgcc ggcgctgcca 120
acggaagggc gggtaggacg gagtttcgtc atgttggcca ggcccatttg agatctttga 180
agatatcctc aacgtgaggc tctgctgcca tgaaggtgaa gattaagtgc tggaacggcg 240
tggccacttg gctctgggtg gccaacgatg agaactgtgg catctgcagg atggcattta 300
acggatgctg ccctgactgc aaggtgcccg gcgacgactg cccgctggtg tggggccagt 360
gctcccactg cttccacatg cattgcatcc tcaagtggct gcacgcacag caggtgcagc 420
agcactgccc catgtgccgc caggaatgga agttcaagga gtgaggcccg acctggntct 480
cgctggaggg gcatcctgag actccttcct catgctggcg ccgatggctg ctggggacag 540
cgcccctgag ctgcaacaag gtggaaacaa gggctggagc tgcgtttgtt ttgccatcac 600
tatgttgaca cttttatcca ataagtgaaa actcattaaa ctactcaaat cttaaaaaaa 660
aaawaaawaa atctcggggg gggncccg   688

<210> 203
<211> 304
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c

<400> 203
aaatgtgaaa actaaggcct tgcaagccta tggttcaccc aggggtagga tcaggcacct 60
taactctaga gcccattctc ctaaccactg agccatgatt gtcttacaat tttgaatact 120
gcaaaactgg aagaattgtc tggctattat ctaagctgtt cataagctgg aacaagtaga 180
tctgagggta agaggagttc tgttttaact aggactgagt ttcaaataga gatgtttcag 240
actatagagg gggaaaaatg gcckgggang tccataaatc taagccngtt tcatggatgt 300
tttt   304

<210> 204
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c

<400> 204
gggtcgaccc acgcgtccgc gcgggcgggg acggagctcg gcgtgcttgc tgctggaggg 60

156

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tgatggccct gcaaggctgt gggctccgac ctcaccggga gtcgamarcg agaggttcgc 120
cgaagagcga ggttctgggc gagcgctgaa cgccggcccc aagcaccccg ggtctttaca 180
cagtccgcgt ccacagactc tgacgaagac gtggatctgc tctcgcttta gctgctcgcg 240
gtcctccaga tcatgtccgc gactcctgcg actccgcgcg gaaaaaaaag tttgccaggc 300
gtggactcaa tgacytttcc aastgtgcgc ctcgytgcct ggaccggttt gagcgcggtt 360
gcccaagttg aacttttttgn ggggagggtt ttctctaagg gctgttgtct caatggg   417
```

```
<210> 205
<211> 551
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (458)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (471)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (519)
<223> n equals a,t,g, or c


<400> 205
gggtcgaccc acgcgtccga ctagttctag atcgcgagcg gcccgccctt tttttttttt 60
tttttttttt tggtttccag agtttggctt tattttgcag tacagaaatc atctggagcc 120
gtctgagaca gacatccctg aagcggaggc tctgtcaaat caatactgcg tcgcacttrg 180
tccgttgagg aagccacacc tggggtacaa aagaagcttc tacgtttacc cgctgtacca 240
cggatttctt tcccctttgc tcttaccaat tttaccaggt gaaaacaccg cacagaggct 300
tccctcggaa tgacgctcgg gtctggagtt gggttagaat tgtgggcccg cgtgaccccc 360
acctgtggct gtgttccgtg gccctgtcct aaacagctga cgggacacag acgtagaggg 420
gcggggccac gcagggatgc tgttcccaan tcacgganta tctggtgggc ntcgcaatgg 480
ccantgggac agatggcacg tgaaaggggc cgttccggnt ctcaagcggc agaagcacaa 540
gaccgcggag g                                                     551
```

```
<210> 206
<211> 1101
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c

<400> 206
tcccgggtcg acccacgcgt nccgcccgct ggaggctgga gcttccgggc cctggaaagg 60
ggtccccgcg cgccccgggt cggaggcaga cccctgggtt tgggggacat gggcatttgg 120
ggcgcctgaa cccaagacct ctggatgagc tgccccgttc agaccatgga tcctgaggtg 180
accttgctgc tgcagtgccc tggcgggggc ctgccccagg agcagataca ggccgagctg 240
agccccgccc atgaccgtcg cccactgcca ggtggggacg aggccatcac tgccatctgg 300
gagacccggc taaaggccca accctggctc ttcgacgccc ccaagttccg cctgcactca 360
gccaccctgg cgcctattgg ctctcggggg ccacagctgc tcctgcgcct gggccttact 420
tcctaccgag acttcctggg caccaactgg tccagctcag ctgcctggct gcgacasang 480
ggtgccaccg actggggtga cacgcaggcc tatctggcgg acccactggg ggtgggcgct 540
gcactagcca cagccgatga cttccttgty ttcctgcgcc gctcccggca ggtggctgag 600
gccctgggc tggtggacgt acctggtggg caccctgagc ctcaggccct gtgccctggt 660
ggcagccccc agcaccagga cctcgctggg cagctggtgg tacatgaact cttttccagt 720
gtccttcagg agatctgtga tgaggtgaac ctgccgctgc tcaccctgag ccagcccctg 780
ctgttkggca tcgcccgaaa tgagaccagt gctggccgag ccagtgccga gttctatgtc 840
cagtgcagcc tgacttctga gcaggtgagg aagcactacc tgagtggggg acccgaggcc 900
cacgagtcta caggaatctt ctttgtggag acacagaacg tgcggagatt gcccgagacg 960
gagatgtggg ctgaactctg ccccctcgcca aaggcgccat catcctctac aaccgggttc 1020
agggaagtcc cactggagcg gccctagggt ccccagccct actcccgccg ctctgaaaat 1080
aataaacgac tttattcttg g 1101

<210> 207
<211> 515
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c

<220>
<221> misc feature
```

158

```
<222> (449)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (456)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (474)
<223> n equals a,t,g, or c

<400> 207
gggtcgaccc acgcgtccgc ccacgcgtcc ggcrgataga gcgccatgaa ggcctcgggc 60
acactgcgag aatacaaggt ggtggggcgc tgcctgccca cccccaaatg tcgcactccg 120
ccgctgtatc gcatgcgaat ctttgcacct aatcacgtgg tcgccaagtc ccgcttttgg 180
tactttgtgt ctcagctgaa aaagatgaag aagtcctcag gggaaatcgt ctactgtgga 240
caggtgtttg agaaatcccc cttgcgagtg aagaacttcg gcatctggct gcgctatgac 300
tcgagaagcg gtacccacaa catgtaccgg ggagtaccgg ggacctgacc amcgcgggcg 360
ccgtcaccca gtggttaccg agacatgggc gcccgacacc gttgcccgag cgcattcgat 420
tccagatnct tgaagtggna ggagattgnc agccancaat tgccgccggg ccancattca 480
agcatttcca aggattccaa gatcaattcc cattg                              515

<210> 208
<211> 269
<212> DNA
<213> Homo sapiens

<400> 208
aagcattgtg ggtaaaggcc tggaggcagg aaagtgaagg acaatttcaa gaaactcagt 60
tcatcaattt tcatcaacac cttcctgggc catgcctggg tactgagraa cccagccctg 120
aatctggaca tcattttccc tttcagagca tagaatgcag ggggatccag ggaatgggtt 180
aacagaagag gaagctggwt caaggagacc tttgcgtacc aggtgaaggt gtttgaactt 240
tgttcttgca ggcaggcaga gcacggaca                                     269

<210> 209
<211> 734
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (732)
<223> n equals a,t,g, or c
```

<400> 209
cgactggttg ttaccgagga agatggcggc gccagacccg aggcgctagg gaagatcgca 60
ccgcggacgc ccgctgagct tggcgcacgg gccgaccagg agctggtgac tgccctcatg 120
tgtgatttgc ggcggccagc ggcaggtggg atgatggact tggcctacgt ctgtgagtgg 180
gagaaatggt ccaagagcac ccactgccca tcggtgcccc tggcctgcgc ctggtcctgc 240
cgaaatctca tcgccttcac catggacctg cgcacgantg accaggacct gacccgcatg 300
atccacatcc tggacacgga gcaccctgg gacctgcact cgatcccctc agagcaccac 360
gaggccatca cctgcctgga gtgggaccag tcaggctccc ggctcctgtc agcagatgcc 420
gacgggcaga tcaagtgctg gagcatggcg gaccacctgg ctaatagctg ggagagctca 480
gtgggcagcc tagtggaggg ggaccccatt gtggccctgt cctggctgca caatggtgtg 540
aaactggccc tgcacgtgga gaagtcgggc gcctccagct tcggggagaa gttctcccga 600
gtcaagttct caccygttct cacgctgttc ggcggcaagc catggagggc tggatcgcgg 660
tgacggtcag cggcctggtc accgtgtccc tgctgwaasc agcgggcagg tgctgacgtc 720
caccgagagc tntt   734

<210> 210
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (561)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (567)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (577)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (580)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (636)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (654)
<223> n equals a,t,g, or c

<400> 210

160

```
cccgccagcg ttgaggttta tcacgacagc ctgtgccgaa aaatctggcg tgaggatgat 60
aaatggcatg tcatttttcg tgcagacggc tgggagcaac atattaccgc ccgctatctg 120
gtcggtgccg atggcgcaaa ctcgatggtg cggcgacatc tctacccgga tcatcaaatc 180
cgtaaatatg tcgctatcca gcagtggttc gcggagaaac atccggtgcc gttctactcc 240
tgcatctttg ataattcgat aactaactgt tattcatgga gtatcagcaa agacggktat 300
tttatctttg gcggtgccta tccaatggaa agacggtcag acgsgtttca sgacgcttra 360
agagaaaatg agcgcctttc ·agttccagtt tggtaagacg gtgaaaagcg aaaaatgcac 420
gggtgctgtt tccctcgcgc tggcaggatt ttgtctgcgg taaggacaac gcctttcttg 480
attggtgaac ggcgggattt atcagcgcca gctcgctgga agggattagc tatgcgctgg 540
atagcacaga catttctgcg ntcgtgntac tgaacanccn gagaagctca ataccgttac 600
tggcgcgcca cccgaaactg ggttaaactc ttcggnaaga tataaaaagc catnctga   658
```

<210> 211
<211> 204
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c

<400> 211
```
attcggagag ccatctctga cagttagagc cgatatcact ggaagatatt caatcgtctc 60
tatgcttacg acctgcagat acagtctgtt nttncacatg aagaaagtct caagttgctg 120
aagactgaat tgtaagaaaa atctccagcc cttctgtctg cagcttgaga cttgaaccag 180
agagtgtgag agctgctgtt ggag                                        204
```

<210> 212
<211> 1271
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1222)
<223> n equals a,t,g, or c

<400> 212
```
ttccgcagcc ttgccccagc ccactccccc tctcaccct a ccacagagca tggtaaatac 60
caagcccgag aagacggagg aggactcaga ggaggtgagg gagcagaaac acaagacctt 120
cgtggaaaaa tacgagaaac agatcaagca ctttggcatg cttcgccgct gggatgacag 180
ccaaaagtac ctgtcagaca acgtccacct ggtgtgcgag gagacagcca attacctggt 240
catttggtgc attgacctag aggtggagga gaaatgtgca ctcatggagc aggtggccca 300
ccagacaatc gtcatgcaat ttatcctgga gctggccaag agcctaaagg tggaccccg 360
ggcctgcttc cggcagttct tcactaagat taagacagcc gatcgccagt acatggaggg 420
```

161

```
cttcaacgac gagctggaag ccttcaagga gcgtgtgcgg ggccgtgcca agctgcgcat 480
cgagaaggcc atgaaggagt acgaggagga ggagcgcaag aagcggctcg gccccggcgg 540
cctggacccc gtcgaggtct acgagtccct ccctgaggaa ctccagaagt gcttcgatgt 600
gaaggacgtg cagatgctgc aggacgccat cagcaagatg gaccccaccg acgcaaagta 660
ccacatgcag cgctgcattg actctggcct ctgggtcccc aactctaagg ccagcgaggc 720
caaggaggga gaggaggcag gtcctgggga cccattactg gaagctgttc ccaagacggg 780
cgatgagaag gatgtcagtg tgtgacctgc cccagctacc accgccacct gcttccaggc 840
ccctatgtgc ccctttttcag aaaacagata gatgccatct cgcccgctcc tgacttcctc 900
tacttgcgct gctcggccca gcctgggggg cccgcccagc cctccctggc ctctccactg 960
tctccactct ccagcgccca ttcaagtctc tgctttgagt caaggggctt cactgcctgc 1020
agccccccat cagcattatg ccaaaggccc gggggtccgg ggaagggcag aggtcaccag 1080
gctggtctac caggtagttg gggagggtcc ccagccaagg ggccggctct cgtcactggg 1140
ctctgttttc actgttcgtc tgctgtctgt gtcttctatt tggcaaacag caatgatctt 1200
ccaataaaag atttcagatg cnaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa 1260
aaaaaaaaaa g                                                     1271
```

<210> 213
<211> 1025
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (991)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1007)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1019)
<223> n equals a,t,g, or c

<400> 213
```
cggacgcgtg ggcgagcgtg atagccaaca ggaaccggga gcggggtccc gggactggga 60
agaaacggcg gccgggaggg ggctccgggg accatggggc tcctgaccat tctgaagaag 120
atgaagcaga aagagcggga gctgcgactg ctcatgcttg gcctggacaa tgctggaaag 180
acaaccatcc tgaagaagtt caatggggag gacatcgaca ccatctcccc aacgctgggc 240
ttcaacatca gaccctgga gcaccgagga ttcaagctga acatctggga tgtgggtggc 300
cagaagtccc tgcggtccta ctggcggaac tactttgaga gcaccgatgg cctcatctgg 360
gtagtggaca cgcagaccg ccagcgcatg caggactgcc agcgggagct ccagagcctg 420
ctggtggagg agcgcctggc cggagcaacc ctcctcatct ttgctaataa gcaggacctg 480
cctggagcac tgtcctctaa cgccatccgc gaggycctgg agctggactc catccgcagc 540
caccactggt gcatccaggg ctgcagcgcc gtcaccgggg agaacctgct gccgggcatc 600
gactggctcc tggatgacat ttccagccgc attttcacag ctgactgaac cactccagat 660
gccccccacc tagcagtcca ggtccctcaa ccttcaccaa acactaccca tgggggggttg 720
ggagtcagcc ggccaaacta acactccccc tcctccaccc cagcctgctg ctgctactgc 780
tgcccgctgc tgctctgtgg ccacccggct cccatggcgg gagggctgtg ccctggctgt 840
```

162

```
ctctctggct cctgacctgg cctttggcta ccataccaag aagagagggc tgggcgggga 900
ggagctgcta ctgctgctac cgaggctgtg ggcctcatcc ttcactcagt tgtgaaataa 960
accgctcctt gccccgmaaa aaaaaaaaaa naaaaaaaa aaaaaancccc gggggggggnc 1020
ccgga                                                             1025
```

<210> 214
<211> 351
<212> DNA
<213> Homo sapiens

<220>   .
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

<400> 214
```
ggcacgagtr aactatatac ctcaaagaat tagaaaaaga agaacaaact aagctcaaag 60
ttagcagaag gaaggaaata gtaaatatta cagcagaagt aaagtagagg ctagaaaaat 120
aataaaaaag atcaacaaaa tggtatttgt tctcatacta tgataaagac atacttgaga 180
accgcattat ttatggggaa aagaagttta attgactcac agttccacag gctgtacagg 240
aggcatggct tagggaggcc tcagggaaac ttagratcca tggtggaagg tgkargagga 300
agcatgcacc atcttcactg gccagagcag gnggagagag agcaaatttg g          351
```

<210> 215
<211> 1087
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1075) .
<223> n equals a,t,g, or c

<400> 215
```
gctggagtcc cagtccaccc gccacgcccg agcagggcct gtccgccttc tacctctcct 60
actttgacat gctgtaccct gaggacagca gctgggcagc caaggcccct ggggccagca 120
gtcgggagga gccacctgag gagcctgagc agtgcccggt cattgacagc caagccccag 180
cgggcagcct ggacttggtg cccggcgggc tgaccttgga ggagcactcg ctggagcagg 240
tgcagtccat ggtggtgggc gaagtgctca aggacatcga gacggcctgc aagctgctca 300
acatcaccgc agatcccatg gactggagcc ccagcaatgt gcagaagtgg ctcctgtgga 360
cagagcacca ataccggctg ccccccatgg gcaaggcctt ccaggagctg gcgggcaagg 420
agctgtgcgc catgtcggag gagcagttcc gccagcgctc gcccctgggt ggggatgtgc 480
tgcacgccca cctggacatc tggaagtcag cggcctggat gaaagagcgg acttcacctg 540
gggcgattca ctactgtgcc tcgaccagtg aggagagctg gaccgacagc gaggtggact 600
catcatgctc cggcagccc atccacctgt ggcagttcct caaggagttg ctactcaagc 660
cccacagcta tggccgcttc attaggtggc tcaacaagga gaagggcatc ttcaaaattg 720
aggactcagc ccaggtggcc cggctgtrgg gcatccgcaa gaaccgtccc gccatgaact 780
acgacaagct gagccgctcc atccgscagt attacaagaa gggcatcatc cggaagccag 840
acatctycca gcgsctcgtc taccagttcg tgcaccccat ctgagtgcct ggcccagggc 900
ctgaaacccg ccctcagggg cctctctcct gcctgccctg cctcagccag gccctgagat 960
ggggggaaaac ggcagtctgc tctgctgctc tgaccttcag agcccaaggt caaggagggg 1020
```

```
caaccaactg cccaggggga tatgggtcct cttggggcct tcgggaccct ggggncaagg 1080
ggctttc                                                          1087
```

```
<210> 216
<211> 1977
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1873)
<223> n equals a,t,g, or c

<400> 216
cgcctgcngg naccggtccg gaattcccgg gtcgacccac gcgtccggca gaagaagagg 60
aggaggaaga tgaggaagag gaggaagaag aggaggagga ggaggaagaa gagcctcagc 120
agcgagggca gggagagaag tcagccacgc cctcacggaa gattctggac cctaacactg 180
gggagccagc tcccgtgctg tcctccccac ctcctgcaga cgtctccacc ttcctggctt 240
ttccctctcc agagaagctg ctgcgcctag ggcccaagag ctccgtgctg atagcccagc 300
agactgacac gtctgacccc gagaaggtgg tctctgcctt cctaaaggtg tcatctgtgt 360
tcaaggacga agctactgtg aggatggcag tgcaggatgc agtagatgcc ctgatgcaga 420
aggctttcaa ctcctcgtcc ttcaactcca acaccttcct caccaggctc ctcgtgcaca 480
tgggtctgct caagagtgaa gacaaggtca aggccattgc caacctgtac ggccccctga 540
tggcgctgaa ccacatggtg cagcaggact atttccccaa ggcccttgca cccctgctgc 600
tggcgttcgt gaccaagccc aacagcgccc tggaatcctg ctccttcgcc cgccacagtc 660
tgctgcagac gctgtacaag gtctagactc aaagcctctc ccatcccttg gcctggacca 720
gtgagctggg gagggactcg gatgaactga ggcgcagcct acgccattgc cttggacagg 780
actctggcca caggcagggc gggtctgtgt cccatgtgtc ctgtcagtcc cctgagtatg 840
tgtgtgggtg tggcgcatgt gcaggtctgt gcctcctgtc gggatttggg ttttaacgtc 900
ttctgctggc ccagccctgc tctgttgtgg ggagttggcc cccaggggaa agggctgtga 960
gctgctccgc cattaaactc acctccacct gagggcgctc tgctgatctc cgcctgggcc 1020
ctgatggccg tccccaccca cctgccttcc ggcccggctc cctggcggag caraacccar 1080
ggagttgccc gcgtgctgtc cttcccctct gtgttgtgat tgggttgttt cctgccctgc 1140
ctggggctgc ttctcgtcac caagccctgg tcctgcggca gctgtcaccc ctaccatcca 1200
taccactgtg ctgaccgctc agcctgaaga gcagagaatg ccatgggtgg gactgtgggg 1260
gtcggatcgt ggggttgttg gcagagggca accctgggcc ccacaccgtg tggacaggca 1320
gacaccagat tgtccaggag caggagctgc tgggactgcg ctggccccgg acctagtggg 1380
ccttctcctg gctgctgaga tgtcgtctgt gactggcctg gctggagggg gagtgttgac 1440
aacccaaagc tgttctccag tctggggagg gagaggcagg gtccccaatg tccgagctgc 1500
atctggacgc tgctcttaaa ggacctcctg gggcaggggga gcggtagggt ctggactggg 1560
cagatgctgt atgacctccc tgagcacccg tgactgcccc atgctttccc ctttgtgctc 1620
```

```
tgtgtgtgtc tggctgtgcc cggggggcttc acaaataaag tcgtgtggca gcttcagaga 1680
ctcagaaact ctcactgaaa gcgggatagt ctcgggggcc gttgtacgtg gagtcccacc 1740
tcggcagagc atgcggcccc gcagcagtct gtggggcagt cagccctgca gaagggcccg 1800
gcctcggcct caggcactac ctgggaagtg gcagtcctga gtgggggccc attttcctgc 1860
ctggscacac ctnacccagc accctgcctt tgggctgcag ctcgcttggc ttctgcgttg 1920
ctccttcact atggaagcca cctcccttgg gatcctttgc tccactgcca catatgt     1977
```

<210> 217
<211> 2815
<212> DNA
<213> Homo sapiens

<400> 217
```
aattcccggg tcgacccacg cgtccgggcg cccgcgtctg agcccagagg gctgtggagt 60
gtcccggccg gccccgagca ccccgcgct gtcggtcccc cgctccggtc tttcgctttg 120
gcttccaact agttaaatgc ccttgagcgc gggtttccgc ggcccggctc ttcgcccccg 180
cggcgcgagt tgagccgttt ccccgcgctg tccgcgcggg cgctccgaca gcggctctgc 240
agggtccgcg gccagcgtcc ggccaccgct cggccgccac tcaaggctca cgcgtcgatg 300
tgtagctaca tagttatctg tgtacatcca cgctggggca tttttctcct gcttaatgag 360
gacttgactc gggagcaagt gtgaatcatt gccggggctg ggaaaggagg aaggcgcatt 420
taaccccctc ccacccctct ccatgtccgt gtgtcactcg gctcggtcca cctggcgcgg 480
ccggtcctgg ggctgctgct gctgttgacg acgacgacga cgacggggggc tgcctctgct 540
gtcccgggag tttcctcctg ctccggccac acagctcctg gggattgttc ctcttcgaac 600
cagaacctcg gcctgaccgg cactttggct ccaaaataac tttattttg ggggagaaag 660
cacatcacga accagtcaaa atcgtggttt atttctgtaa cgtgaagact tctgctcttt 720
tttctttgtt tgtttttttc gtaaacatct gggtgtatat caaacggcaa gatgtccagt 780
aatgtcccgg cggatatgat aaatttgcgc ctcattttgg taagcggaaa aacaaaagag 840
ttcctgtttt ctcctaacga ttctgcttct gacattgcaa agcatgtata tgacaattgg 900
ccaatggact gggaagaaga gcaggtcagc agtccaaata ttctacgact tatttatcaa 960
ggacgatttc tacatggaaa tgtcacatta ggagcattaa aacttccttt tggcaaaaca 1020
acagtgatgc atttggtggc cagagagaca ttaccagagc caaactctca aggtcagagg 1080
aatcgtgaga agactggaga gagtaattgt tgtgtaatcc tgtaaacact gtctgcctag 1140
tgtgatgtga tatagtcttt gtctttcatg ctgctgggac agaaaagacc cgacattgct 1200
tcagaaaccg ttcagaacag tctgcctgta aacacatgga actgaattac cacatgaaca 1260
ctgtcatctt ttctcatgaa agtaaaaaga accaagaaca tttttcactc tgattttta 1320
tttcttgtat tttttgttga gctgtttaa cacatattgg tttttgaatg cagtcaatct 1380
ccaggggaaa agttaacaag ttatctttcg tagcagaaac cattttgctg ccacaaaatt 1440
ttcatcatca gaactaataa atcaagtgtt ccaaatacaa tttgcactaa aaagattggc 1500
attattttcc tcatcagcag aatttataac agtgtgtggt atctagaaat acttatatat 1560
acaattccac actggaagac actcagcaat taatgaagtt aattactggg ccaacttgag 1620
aggaaaaaat ggaaaagaaa ctaaaatgtt gggtgaattc taccaaagtc agccgtggtg 1680
gctgcactgg cacagaatac taaactgagt gtgactattt tcactgcaac aaatgaaaaa 1740
acaaaatgtg cctgtttaaa gcactcagta gagggctgat gaaactaatt ttttttcctt 1800
taagacatgc actcttgagt cctacagtaa ctgagtgttt gtttagacag cacaagaagg 1860
ggtgagagtg cgtctcctag ccttaatgtg ggagggtagt ttcagtcact catcggcttt 1920
cattattgtg crgaaatatt agaaaacctc attgatcaat tttatgtatt tgaatatcag 1980
caaattgaaa ttttccataa ttatcattaa tttgtaacca catccagtgt catgcttact 2040
ccttagagtt cagatgaatt cttaaaatta aaaaaaaact ccatagtact aattttgktt 2100
ctttatatag tttgcgtttg atattagtgc ttgcaattgt attaaagtca aaagctgatt 2160
tttatggcat acacaagaat gccactttt cttttatttc ataccaataa tttaaagatt 2220
gatatgctaa aaacaatttg cacagcacta aagcatgagc tactttcatc taaacctgta 2280
```

165

```
aaaatatgaa agatttttat attttttcac tgggaagaaa ttcttcctgg atgaaattac 2340
aaatatgtgt agaatatatt taataaaaga cttataaaat acctaactac aggacttaaa 2400
atatagattg gcgcgtagta tatagaacaa tattccatat aaataagttt agcctttata 2460
aaaatgaagt tgcaggctga cattacattc tgtacttact aagtgtcaac agcccttaca 2520
aacattaaat gtaaatggtt tcaaatggtc agcgttgttt aaatgtaatc atgttatttt 2580
attcattgtt aatgctttga tgaaaaggct ttatatgcag tagatctacg aaaatattgt 2640
tcatactgat cagaattaaa tttgtataga gcagagtttt aaaatgaatg taaatagcac 2700
taaacgtttt ctttctgcaa cctgtactta cagattcttc ctgtaaacta aataaaaaaa 2760
aaatgatagt gcaaaaaaaa aaaaaaaggg cggccgctcg cgatctagaa ctagt      2815
```

<210> 218
<211> 1645
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1643)
<223> n equals a,t,g, or c

<400> 218
```
gcccacgcgt ccggagggcg gggacaactg ggtcttttgc ggctgcagcg ggcttgtagg 60
tgtccggctt tgctggccca gcaagcctga taagcatgaa gctcttatct ttggtggctg 120
tggtcgggtg tttgctggtg cccccagctg aagccaacaa gagttctgaa gatatccggt 180
gcaaatgcat ctgtccacct tatagaaaca tcagtgggca catttacaac cagaatgtat 240
cccagaagga ctgcaactgc ctgcacgtgg tggagcccat gccagtgcct ggccatgacg 300
tggaggccta ctgcctgctg tgcgagtgca ggtacgagga gcgcagnacc accaccatca 360
aggtcatcat tgtcatctac ctgtccgtgg tgggtgccct gttgctctac atggccttcc 420
tgatgctggt ggaccctctg atccgaaagc cggatgcata yactgagcaa ctgcacaatg 480
aggaggagaa tgaggatgct cgctctatgg cagcagctgc tgcatccctc gggggacccc 540
gagcaaacac agtcctggag cgtgtggaag gtgcccagca gcggtggaag ctgcaggtgc 600
aggagcagcg gaagacagtc ttcgatcggc acaagatgct cagctagatg ggctggtgtg 660
gttgggtcaa ggccccaaca ccatggctgc cagcttccag gctggacaaa gcaggggct 720
acttctccct tccctcggtt ccagtcttcc ctttaaaagc ctgtggcatt tttcctcctt 780
ctccctaact ttagaaatgt tgtacttggc tattttgatt agggaagagg gatgtggtct 840
ctgatctcyg ttgtcttctt gggtctttgg ggttgaaggg aggggaagg caggccagaa 900
gggaatggag acattcgagg cggcctcagg agtggatgcg atctgtctct cctggctcca 960
ctcttgccgc cttccagctc tgagtcttgg gaatgttgtt acccttggaa gataaagctg 1020
ggtcttcagg aactcagtgt ctgggaggaa agcatggccc agcattcagc atgtgttcct 1080
ttctgcagtg gttctttatc accacctccc tcccagcccc agcgcctcag ccccagcccc 1140
agctccagcc ctgaggacag ctctgatggg agagctgggc cccctgagcc cactgggtct 1200
tcagggtgca ctggaagctg gtgttcgctg tcccctgtgc acttctcgca ctgggcatg 1260
gagtgcccat gcatactctg ctgccggtcc cctcacctgc acttgagggg tctgggcagt 1320
ccctcctctc cccagtgtcc acagtcactg agccagacgg tcggttggaa catgagactc 1380
gaggctgagc gtggatctga acaccacagc ccctgtactt gggttgcctc ttgtccctga 1440
acttcgttgt accagtgcat ggagagaaaa ttttgtcctc ttgtcttaga gttgtgtgta 1500
```

166

```
aatcaaggaa gccatcatta aattgtttta tttctctcaa aaaaaaaaaa aaaaaaccaa 1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aangg                                       1645
```

```
<210> 219
<211> 478
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (452)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c

<400> 219
tcgacccacg cgtccgggga attcaaggag acgggggcga cgcggctgct ggcgcctcct 60
cgggtttggg gctgccgcca tcatgccggg gatagtggag ctgcctactc tggaggatct 120
gaaagtgcag gaggtgaaag tcagttcttc ggtgctcaaa gctgccgccc atcactatgg 180
agttcagtgt gacaagccca acaaggagtt catgctctgc cgctgggaag aaaaagaccc 240
ccggcggtgt ttagaggaag gcaagctcgt caacaaktgt gctctggayt tcttcaggca 300
gataaagctt tcactgtgca gagcctttta cagactattg gacntgcatc gactactccg 360
gcctgcagtg ttttcgtcgc tgccgcaaac agcaggccaa tttgacgatg tgtgnggggc 420
aactgggatg gtgcggctga actggggaaa angttccagt caccaaatng aaaacagt    478
```

```
<210> 220
<211> 832
<212> DNA
<213> Homo sapiens

<400> 220
attttagtag agacaaggtt tcaccatgtt ggccaggctg gtctcgaact cctggcctca 60
ggtgatccac ctgccttggc ctcccaaagt gctccgatta caggtgkgag ccaccggcc 120
cagcccctcc cttgtgtttc aaccaatcgg aagtgaattt aactagatgt agtaaccttt 180
tttttcttta cttctaaaaa agttacagtt tactaataaa gttaagtctg gttctgtcct 240
agaggaaata aattcactat taattcatgt cttaagttac ttgggttaaa acactttcag 300
ccacccagat taattaaagt ggagcagtgg agcccctggc tgggagatgg cctccagagg 360
```

```
agcagctgca gggcaygttc tgggcttagc gacagaggca agcaagggac tggtgtctct 420
ggtgagaggt gggtttgatg tatctctgtc ctatgctggt ctctcttctc ctttataaaa 480
tcctctgtgg tcaactgact actgcgtatc gcagtggaat aagactgcac agttgctggt 540
aggtgagttt aaagtcttaa tctatgcatt cagagaaata ttttttatatg ctttgtgtaa 600
tttataacaa ggattttttt tttagctttg ttaactgtga attcacccct cctcctccac 660
tgcatattta aagcatgtgt tcacactgtg tgtaaacatt cactgaagat tttttctttg 720
tgcattgctg actgttcaaa cataacaagt attattaaaa ttaaatatta actgacaaaa 780
aaaaaaaaaa aaaactcgag gggggggcccg gtacccaatt cgcccggagt ag         832


<210> 221
<211> 1892
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1892)
<223> n equals a,t,g, or c


<400> 221
tgactctggg ctagagacct ccccaacaga gctgaggcca aggccgactc cccctctcaa 60
atggcgtggt ctgggcctat gacggcccct gcagtggagt ctgtactggc tgcgggggac 120
cctgctcatt tgaaaatctg acatcagctg ggcagtcgcc cccctcctcc tttcctccct 180
ctactctgac acagcactta gcacctgaat cttcgtttct ctcccaggga ccctccattt 240
tccatatcca ggaaaatgtg atgcgccaca ggtatcagcg tctggwtcgc cacttcacgt 300
tttagccaca agtgactcag tggaagatcc agagtcaaca gaggctcgtc aggaagatgt 360
ctacagaaaa ggtagaccaa aaggaggaag ctggggaaaa agaggtgtgc ggagaccaga 420
tcaaaggacc ggacaaagag gaggaaccac cagctgctgc atcccatggc caggggtggc 480
gtccaggtgg cagagcagct aggaacgcaa ggcctgaacc tggggccaga caccctgctc 540
tcccggccat ggtcaacgac cctccagtac ctgccttact gtgggcccag gaggtgggcc 600
aagtcttggc aggccgtgcc cgcagctgct gctgcagttt ggggtgctct tctgcaccat 660
cctccttttg ctctgggtgt ctgtcttcct ctatggctcc ttctactatt.cctatatgcc 720
gacagtcagc cacctcagcc ctgtgcattt ctactacagg accgactgtg attcctccac 780
cacctcactc tgctccttcc ctgttgccaa tgtctcgctg actaagggtg gacgtgatcg 840
ggtgctgatg tatggacagc cgtatcgtgt taccttagag cttgagctgc cagagtcccc 900
tgtgaatcaa gatttgggca tgttcttggt caccattttcc tgctacacca gaggtggccg 960
aatcatctcc acttcttcgc gttcggtgat gctgcattac cgctcagacc tgctccagat 1020
gctggacaca ctggtcttct ctagcctcct gctatttggc tttgcagagc agaagcagct 1080
gctggaggtg gaactctacg cagactatag agagaactcg tacgtgccga ccactggagc 1140
gatcattgag atccacagca agcgcatcca gctgtatgga gcctacctcc gcatccacgc 1200
gcacttcact gggctcagat acctgctata caacttcccg atgacctgcg ccttcatagg 1260
tgttgccagc aacttcacct tcctcagcgt catcgtgctc ttcagctaca tgcagtgggt 1320
gtggggggggc atctggcccc gacaccgctt ctctttgcag gttaacatcc gaaaaagaga 1380
caattcccgg aaggaagtcc aacgaaggat ctctgctcat cagccagggc ctgaaggcca 1440
ggaggagtca actccgcaat cagatgttac agaggatggt gagagccctg argatccctc 1500
aggacagag ggtcagctgt ccgaggagga gaaaccagat cagcagcccc tgagcggaga 1560
agaggagcta gagcctgagg ccagtgatgg ttcaggctcc tgggaagatg cagctttgct 1620
gacggaggcc aacctgcctg ctcctgctcc tgcttctgct tctgcccctg tcctagagac 1680
tctgggcagc tctgaacctg ctgggggtgc tctccgacag cgccccacct gctctagttc 1740
ctgaagaaaa ggggcagact cctcacattc cagcactttc ccacctgact cctctcccct 1800
cgtttttcct tcaataaact attttgtgtc agcttcaaaa aaaaaaaaa aaaaaaaaaa 1860
```

```
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa an                        1892
```

<210> 222
<211> 868
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (829)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (860)
<223> n equals a,t,g, or c

<400> 222
```
ntttcagcag ttccgcatgc ccntccgtgg naagcctgtt cgtgntattg ggcaagaacc 60
cccatgatgc ccaaggccat ccaagggcat ctgaagacca acccagctct ggaaaacctg 120
ttacttcata tccggggggaa tgtggctttg tgttcaccaa ggaggcctca cttgagatca 180
gggacatgct gctggccaat aaggtgccag ctgccgcccg tgctggtgcc atagccccat 240
gtgaggtcac tgtgccagcc cagaacactg gtctggggcc cgagaagacc tccttcttcc 300
aggctttagg catcaccact aaaaatctcca gaggaaccat tgaaatcctg agtgatgtgc 360
agctgattaa gaccggagac aaagtgggag ccagtgaagc cacactgctg aacatgctga 420
acatctcccc cttctccttt gggctgatca tccagcaggt gtttgacaat ggcagcatct 480
acaaccctga agtgcttgac atcacagagg aaactctgca ttctcgcttc ctggagggtg 540
tccgcaatgt tgccagcgta tgtctgcaga taggttaccc aactgtggca tcagtgcccc 600
attctatcat caatggatac aagcgggtcc tggctttgtc tgtggagact gattacacct 660
ttccacttgc tgaaaaggtc aaggccttct ggctgatcc atctgcattt gtggctgctg 720
cccctgtggc cgctgccacc actgctgcac ctgctgctgc tgcagcccca gccaaagttg 780
```

169

```
aagcaaagga agagtcggag gaawcggatg agagkattkt camttcgana atcagcaaaa 840
gcaacaattc cagccagttn attgtgaa                                       868


<210> 223
<211> 1516
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1493)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1497)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1508)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1509)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1516)
<223> n equals a,t,g, or c


<400> 223
gaatgagcag gataactgtg tcctgattca tgatgtggac caaaggaaca gcgataaaga 60
tatctttggg gatgcctgtg ataactgcct gagtgtctta rataacgacc agaaagacac 120
cgatggggat ggaagaggag atgcctgtga tgatgacatg gatggagatg gaataaaaaa 180
cattctggac aactgcccaa aatttcccaa tcgtgaccaa cgggacaagg atggtgatgg 240
tgtgggggat gcctgtgaca gttgtcctga tgtcagcaac cctaaccagt ctgatgtgga 300
taatgatctg gttggggact cctgtgacac caatcaggac agtgatggag atgggcacca 360
ggacagcaca gacaactgcc ccaccgtcat taacagtgcc cagctggaca ccgataagga 420
tggaattggt gacgagtgtg atgatgatga tgacaatgat ggtatcccag acctggtgcc 480
ccctggacca gacaactgcc ggctggtccc caacccagcc caggaggata gcaacagcga 540
cggagtggga gacatctgtg agtctgactt tgaccaggac caggtcatcg atcggatcga 600
cgtctgccca gagaacgcag aggtcaccct gaccgacttc agggcttacc agaccgtggt 660
cctggatcct gaaggggatg cccagatcga tcccaactgg gtggtcctga accagggcat 720
ggagattgta cagaccatga acagtgatcc tggcctggca gtggggtaca cagcttttaa 780
tggagttgac ttcgaaggga ccttccatgt gaatacccag acagatgatg actatgcagg 840
ctttatcttt ggctaccaag atagctccag cttctacgtg gtcatgtgga agcagacgga 900
gcagacatat tggcaagcca ccccattccg agcagttgca gaacctggca ttcagctcaa 960
ggctgtgaag tctaagacag gtccagggga gcatctccgg aactccctgt ggcacacggg 1020
```

170

```
ggacaccagt gaccaggtca ggctgctgtg gaaggactcc aggaatgtgg gctggaagga 1080
caaggtgtcc taccgctggt tcctacagca caggccccag gtgggctaca tcagggtacg 1140
attttatgaa ggctctgagt tggtggctga ctctggcgtc accatagaca ccacaatgcg 1200
tggaggccga cttggcgttt tctgcttctc tcaagaaaac atcatctggt ccaacctcaa 1260
gtatcgctgc aatgacacca tccctgagga cttccaagag tttcaaaccc agaatttcga 1320
ccgcttcgat aattaaacca aggaagcaat ctgtaactgc ttttcggaac actaaaacca 1380
tatatatttt aacttcaatt ttctttagct tttaccaacc caaatatatc aaaacgtttt 1440
atgtgaatgt ggcaataaag gagaagagat catttttaaa aaaaaaaaa aanttcnggg 1500
gggcccgnnc caattn                                                  1516
```

```
<210> 224
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (887)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1242)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1264)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1303)
<223> n equals a,t,g, or c

<400> 224
gtccgcgcgg gcctcggacc tggggccccc ccggacgtgg acggggcgg cggcggggcc 60
ccggactccg tcggcgcaca tccccgtccc agcgcagaga gccacccccag gaaaagcccg 120
gctggacgag gtcatggctg ccgctgcnst tacaagcctg tccaccagcc ctctccttct 180
gggggcccca gttgcagcct tcagcccaga gcctggcctg gagccctgga aggaggccct 240
ggtgcggccc ccaggcagct acagcagcag cagcaacagt ggagactggg gatgggacct 300
ggccagtgac cagtcctctc cgtccacccc gtcacccca ctgcccccg aggcagccca 360
ctttctgttt ggggagccca ccctgagaaa aaggaagagc ccggcccagg tcatgttcca 420
gtgtctgtgg aagagctgcg ggaaggtgct gagcacggcg tcggcgatgc agagacacat 480
ccgcctggtg cacctgggga ggcaggcaga gcctgatcag agtgatggtg aggaggactt 540
ctactacaca gagctggatg ttggtgtgga cacgctgacc gacgggctgt ccagcctgac 600
```

```
tccagtgtcc cccacggcct ccatgccgcc tgccttcccc cgcctggagc tgccagagct 660
gctggagccc ccagccctgc ctagtcccct gcggccgcct gccccgcccc tgcccccgcc 720
ccctgtcctg agcaccgttg ctaaccccca gtcctgtcac agtgaccgtg tctaccaggg 780
ctgcctgacg cccgcccgcc tggagccgca gcccacggag gtcggagcct gcccacccgc 840
cttgtcctcc aggatcggag tcaccctgag gaagccccgc ggcgacnsaa agaagtgccg 900
gaaggtgtat ggcatggagc gccgggacct ctggtgcaca gcctgccgct ggaagaaagc 960
ctgccagcgg ttcctggact aagtccggct cgttcaagaa cataagctac caccttctcc 1020
ctccccaccc cctccaggcc cggggctgaa acagcccgag grcagcccca ggggctggcc 1080
ttcaccagct gcagggtctg cttttacttg gggtggggggg gcggggctga ccctgaaccc 1140
tcccccccgc caggtcgggg aggggtccca mcactcaaag tgcctctaaa gaaaccagct 1200
ttttgcact aaaagccaaa acaaaacggt gttcccttta gnccccaagg ggccttgggg 1260
gcanccaacc ttcccgggct tgttggggcc cgtaagattt ttnttc            1306
```

```
<210> 225
<211> 584
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (486)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (542)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (562)
<223> n equals a,t,g, or c

<400> 225
tcgacccacg cgtccggcgt cctctcggag cccgtgcggt cacttagcca agatgcctga 60
ggaaacccag acccaagacc aaccgatgga ggaggaggag gttgagacgt tcgcctttca 120
ggcagaaaty gcscagttga tgtcrytgat catcaaycacy ttctactcga acaargagat 180
cttcttgcgg gactgatctc caactcgtcc gacgctcygg acaaaatccg atacgagagc 240
ctgaccgacc ccagcaagct cgactcgggg aaggagctgc acattaacct catcccgaac 300
aagcaggacc ggaccctcac catcgtggga taccgggatc gcatgaccaa ggccgacctg 360
atcaacaacc tgggcaccat cgccaaktcg gggaccaaag cgttcatgga agytctgcag 420
gcgggcgcag atatttcyat gattggccag ttcggggtcg ggttctattc ggcctacttg 480
gtggcnagaa ggtgacggtg atcaccaagc acaacgatga cgagcattac gcctgggagt 540
cntccgcagg ggctcgttca angttccgca ttgacacagt gaac            584
```

```
<210> 226
<211> 523
<212> DNA
<213> Homo sapiens

<220>
```

172

```
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (498)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (514)
<223> n equals a,t,g, or c


<400> 226
tcgacccacg cgtccgccag cagaaggctg ttgngggacg tctgccagga ctgcatccag 60
atggtgacag acatccagac tgctgtaagg accaactcca cctttgttga agctttggtg 120
gaccatgcca aagcacagtg tgatctcctg gggcccggca tggctgacat gtgcaagaac 180
tatatcaacc agtattcgga cattgccgtc cagatgatga tgcacatgca acccaaagag 240
atctgtggcc tggttgggtt ctgcgaccaa gtgaaggaga tgcccatgca gactctgatc 300
cctgccaaag cggtctcaga gaacgtcatc cctgcattgg aactggtgga gcccattaag 360
aaggacacgg tccaggcaaa gaccagtgtt agctgtggag atatgcgagt tacgtggttg 420
aaggaagtgg ccaagctcca ttggacaaca acaggactga ggaagaaata gtttcaggct 480
tggataaatg tgctccantt gccctaagtc ctanctgaac atg                  523


<210> 227
<211> 2377
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (2369)
<223> n equals a,t,g, or c


<400> 227
gccgatcccg gagtcggagc cgttccaggt ctcgcagccg atctcgctac agccgctcga 60
agtctcggtc ccgcactcgt tctcgatctc ggtcgacctc caagtccaga tccgcacgaa 120
ggtccaagtc caagtcctcg tcggtctcca gatctcgttc gcggtccagg tcccggtctc 180
ggtccaggag tcctccccca gtgtccaaga gggaatccaa atccaggtcg cgatcgaaga 240
gtccccccaa gtctcctgaa gaggaaggag cggtgtcctc ttaagaaaat ggtaatgtct 300
gggaatccga gacacataac cctaattcat aaatgggatt tggggtaggt ctttttgagt 360
cgtgttaatg taagaatgac tcctatcatt aggagtgctg ctcggaggtt actcaccttt 420
gggagtaata ctgaagagag gggtctgcag aaaggatgtg tatgaagctt agataataat 480
ggctgtttcg taaactgttt gagacctatt aatgaaaatg actatttctt gctgttttta 540
tccaacgtct gcattttccc cctttaaagc tgcggtctcc tgtttgataa aagaatattg 600
gccagtattg cagattttaa ctgatttggc tgatcctcca gggaccagtt tctgtgggcg 660
tgtattggar caggtttgtc tttaaatgtt aaagatgcac tatcctctta gagaaacaat 720
cagttcaact attgttgtac tgactgggac ttcatattct aatggatgtg caaaagaat 780
tgcaataaga agcagtgaac atttggaacc ccaaaagaaa gttacaggta ttgcactggg 840
tggggaaagg atagtgtgtc tttaactctt aaattgtttg gtcctatttt ttaaaaagga 900
```

```
aagggcccta agtagctcag atattaaagt agtattctca attaccaaat gtttcatttg 960
aaacaattta tcttaatgaa atatagacca attctctgat ctcgagttgt ttttgtttgg 1020
atacagccct ttttttttttc ttttttttttc ttccccttac ctttcttcac cttggttatt 1080
tggccaggaa tacgtaaatt caaacttgta catgctgatg gtagcctttg tgaaattttc 1140
ctaattgggc cttttaaaaa catggctggg tggaacattt ctgtacccta ctggtttgac 1200
cagagcctta gtaagtacgt gcctgaaact gaaaccatgt gcactttaat ggaaggtaag 1260
ctgaacttct ttcttttcaa acctagatgt atcggcaagc agtgtaaacg gaggacttgg 1320
ggaaaaagga ccacatagtc catcgaagaa gagtccttgg aacaagcaac tggctattga 1380
aaaggttatt ttgtaacatt tgtctaactt tttacttgtt taagctttgc ctcagttggc 1440
aaacttcatt ttatgtgcca tttttgttgct gttattcaaa tttcttgtaa tttagtgagg 1500
tgaacgactt cagatttcat tattggattt ggatatttga ggtaaaattt cattttgtta 1560
tatagtgctg actttttttg tttgaaatta aacagattgg taacctaatt tgtggcctcc 1620
tgacttttaa ggaaaacgtg tgcagccatt acacacagcc taaagctgtc aagagattga 1680
ctcggcattg ccttcattcc ttaaaattaa aaacctacaa aagttggtgt aaatttgtat 1740
atgttattta ccttcagatc taaatggtaa tctgaaccca aatttgtata aagacttttc 1800
aggtgaaaag acttgatttt ttgaaaggat tgtttatcaa acacaattct aatctcttct 1860
cttatgtatt tttgtgcact aggcgcagtt gtgtagcagt tgagtaatgc tggttagctg 1920
ttaaggtggc gtgttgcagt gcagagtgct tggctgtttc ctgttttctc ccgattgctc 1980
ctgtgtaaag atgccttgtc gtgcagaaac aaatggctgt ccagtttatt aaaatgcctg 2040
acaactgcac ttccagtcac ccgggccttg catataaata acggagcata cagtgagcac 2100
atctagctga tgataaatac accttttttt ccctcttccc cctaaaaatg gtaaatctga 2160
tcatatctac atgtatgaac ttaacatgga aaatgttaag gaagcaaatg gttgtaactt 2220
tgtaagtact tataacatgg tgtatctttt tgcttatgaa tattctgtat tataaccatt 2280
gtttctgtag tttaattaaa acattttctt ggtgttagct tttctcagaa aaaaaaaaa 2340
aaaaaaaaa aaaaaaaaa aaaaaaang aaaaaag                              2377
```

```
<210> 228
<211> 463
<212> DNA
<213> Homo sapiens

<400> 228
aatacatgcc aaatggatca ttaaatgaac tcctacatag gaaaactgaa tatcctgatg 60
ttgcttggcc attgagattt cgcatcctgc atgaaattgc ccttggtgta aattacctgc 120
acaatatgac tcctcctttta cttcatcatg acttgaagac tcagaatatc ttattggaca 180
atgaatttca tgttaagatt gcagattttg gttatcaaa gtggcgcatg atgtccctct 240
cacagtcacg aagtagcaaa tctgcaccag aaggagggac aattatctat atgccacctg 300
aaaactatga acctggacaa aaatcaaggg ccagtatcaa gcacgatata tatagctatg 360
cagttatcac atgggaagtg ktatccagaa aacagccttt tgaagatgtc accaatcctt 420
tgcagataat gtatagtgtg tcacaaggac attggactgg tat                   463
```

```
<210> 229
<211> 1232
<212> DNA
<213> Homo sapiens

<400> 229
caggtgagca tctgaacaag gggcagtcgg ccagggtggg cttgcgggag tccccacctt 60
gacctctctc ccttccagct gcccagagcc cagaccaagc atggacgccg tggatgccac 120
catggagaaa ctccgggcac agtgcctgtc ccgcgggggcc tcgggcatcc agggcctggc 180
caggttttttc cgccaactag accgggacgg gagcagatcc ctggacgctg atgagttccg 240
```

```
gcagggtctg gccaaactcg ggctggtgct ggaccaggcg gaggcagagg gtgtgtgcag 300
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gccccccatg tcccaggccc gggaggctgt catcgcagct gcatttgcca agctggaccg 420
cagtggggac ggcgtcgtga cggtggacga cctccgcggg gtgtacagtg gccgtgccca 480
ccccaaggtg cgcagtgggg agtggaccga ggacgaggtg ctgcgccgct tcctggacaa 540
cttcgactcc tctgagaagg acgggcaggt cacactggcg gaattccagg actactacag 600
cggcgtgagt gcctccatga acacggatga ggagttcgtg gccatgatga ccagtgcctg 660
gcagctgtga gcagctccgg ctcagccctg ctgccctggc ctgtcactyc ccaccccttgc 720
cggagacctc ccttccctgg gccccttctc ttctgggcag scacaccaca gagcggggag 780
gggcaggtgg gggaatggag gctgcaggac tggctagacc aggtccctgc cggtccacca 840
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ctctccccac ccacgccatg ctgaccagag gtcttgcagc ccctgtggat gcccccgccg 960
aggtcccccg atccccgcac ccggactgct gctccctgcc cctcccttgc gggtccccca 1020
ggaagccagg tgaccccagg tgggaggctg tgtgtggagg ccatcctgga aggaagtttta 1080
gacctgccca ggtgtggagc gaggggcaca ggggcatcct aacctcagaa actgaaataa 1140
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ataaaaatag caggtaacac gtcaaaaaaa aa 1232
```

```
<210> 230
<211> 1063
<212> DNA
<213> Homo sapiens

<400> 230
gcccacgcgt ccgctcagcg gctgccaaca gatcatgagc catcagctcc tctggggcca 60
gctataggac aacagaactc tcaccaaagg accagacaca gtgggcacca tgggacagtg 120
tcggtcagcc aacgcagagg atgctcagga attcagtgat gtggagaggg ccattgagac 180
cctcatcaag aactttcacc agtactccgt ggagggtggg aaggagacgc tgaccccttc 240
tgagctacgg gacctggtca cccagcagct gccccatctc atgccgagca actgtggcct 300
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ctgagaactc cctctggaat tcttgggggg tgttggggag agactgtggg cctggaaata 480
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agttcagctt ccttccccag gtctctgtgc actctgtctt ggatgctctg gggagctcat 600
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gctgggctat gggaaatgat ttgaataatg gagctgggaa tatggctgga tatctggtac 780
taaaaaaggg tctttaagaa cctacttcct aatctcttcc ccaatccaaa ccatagctgt 840
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tgggctaggg caggggagga gggagagcag ggttggggga gaggctgagg agagtgtgac 960
atgtggggag aggaccagct gggtgcttgg gcattgacag aatgatggtt gktttggatc 1020
atttgattaa taaaaaaaaa tgaaaaaagt gaaaaaaaaa aaa 1063
```

```
<210> 231
<211> 1063
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1056)
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<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1061)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1063)
<223> n equals a,t,g, or c


<400> 231
gatcaccacc agggagcaga atccgttcca gggattgggg tgagtccgac ttcgagcagc 60
agctgccccc caacatcatg tacccagccc gtgactacgt ggagccctgg gcttcgcgta 120
gagtccctag acggggcgaa aacgggaaaa ggggccttaa ctggggcacc tggctccttt 180
gggagctcgg agtttctgac tggcctgcgc aacacctcag aggcaaggkg aacgcgaggg 240
cctataatgc aagaaccaag gcgagtcacg ccctgtctgg gcaaaagagg agtaaagacc 300
cctcagctgc agcccggcag cgcattccta cccagggtcc gccgccagag ctttcccgcg 360
cggtcggata gttacactac tgtccgggac ttcctagccg tgccgcggac catctcaagt 420
gcttccgcca cactcatcat ggcggtggca gtaagtcact tccgcccggg accggaartg 480
tgggatactg cgagtatggc ggcgtcaaag gtgaagcagg acatgcctcc gccggggggc 540
tatgggccca tcgactacaa acggaacttg ccgcgtcgag gactgtcggg ctacagcatg 600
ctggccatag ggattggaac cctgatctac gggcactgga gcataatgaa gtggaaccgt 660
gagcgcaggc gcctacaaat cgaggacttc gaggctcgca tcgcgctgtt gccactgtta 720
caggcagaaa ccgaccggag gaccttgcag atgcttcggg agaacctgga ggaggaggcc 780
atcatcatga aggacgtgcc cgactggaag gtgggggagt ctgtgttcca cacaacccgc 840
tgggtgcccc ccttgatcgg ggagctgtac gggctgcgca ccacagagga ggctctccat 900
gccagccacg gcttcatgtg gtacacgtag gccctgtgcc ctccggccac ctggatccct 960
gcccctcccc actgggacgg aataaatgct ctgcagacct gaaaaaaaaa aaaaaaaaaa 1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaanaaaa nan                1063


<210> 232
<211> 1474
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1337)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1359)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1377)
<223> n equals a,t,g, or c
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<400> 232
ggattcctac cctcatcacg gcctttgtcc ttgctacctc tcaggcccaa gctggatggc 60
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acaaattcgt cattggccac ttaaagggtg cctctgccaa ctggtggaat catcgccact 180
tccagcacca cgccaagcct aacatcttcc acaaggatcc cgatgtgaac atgctgcacg 240
tgtttgttct gggcgaatgg cagcccatcg agtacggcaa gaagaagctg aaatacctgc 300
cctacaatca ccagcacgaa tacttcttcc tgattgggcc gccgctgctc atccccatgt 360
atttccagta ccagatcatc atgaccatga tcgtccataa gaactgggtg gacctggcct 420
gggccgtcag ctactacatc cggttcttca tcacctacat ccctttctac ggcatcctgg 480
gagccctcct tttcctcaac ttcatcaggt tcctggagag ccactggttt gtgtgggtca 540
cacagatgaa tcacatcgtc atggagattg accaggaggc ctaccgtgac tggttcagta 600
gccagctgac agccacctgc aacgtggagc agtccttctt caacgactgg ttcagtggac 660
accttaactt ccagattgag caccacctct tccccaccat gccccggcac aacttacaca 720
agatcgcccc gctggtgaag tctctatgtg ccaagcatgg cattgaatac caggagaagc 780
cgctactgag ggccctgctg gacatcatca ggtccctgaa gaagtctggg aagctgtggc 840
tggacgccta ccttcacaaa tgaagccaca gccccgggga cacygtgggg aagggggtgca 900
ggtggggtga tggccagagg aatgatgggc ttttgttctg aggggtgtcc gagaggctgg 960
tgtatgcact gctcacggac cccatgttgg atctttctcc ctttctcctc tccttttct 1020
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catcagccat ggccctccca gtgcctccta gccccttctt ccaaggagca gagaggtggc 1140
caccgggggt ggctctgtcc tacctccact ctctgcccct aaagatggga ggagaccagc 1200
ggtccatggg tctggcctgt gagtctcccc ttgcagcctg gtcactaggc atcacccccg 1260
ctttggttct tcagatgctc ttggggttca targggcarg tcctagtcgg ggcarggccc 1320
ctgaccctcc cggcttngct taaatctccc tgaacggtng caattggtcc acctttncat 1380
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aggctctctt aagatgttca agggcccaag gccg   1474

<210> 233
<211> 1782
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (591)

177

<220>
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1760)
<223> n equals a,t,g, or c

<400> 233
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aagatganag gctcacccta aaacatcttc nttnctctac cagtgagact atcaaccatg 60
gatctatcta tctatttttt aagcctgcat cacttcttga gataatgagg tttctacctc 120
caaagcctgc tgggtgagca ccttgctcat tatactggwt ctgaatttac ctctttgaag 180
tttctagatg caccacttcc tgctcacagc ctggaattcg gttaacaagt cagtgtcaac 240
ctacctttcc cttcatgatt tatagacttt tgggagtacc ttctggtagc ttttgtcttc 300
ccataggaaa gaggcccaat cccagtttgt cctcacaaag cggccagctc cgtgatatct 360
cttttgcggg cagagttaag attgtacaca gatccccaca agtaccacgr tttttgcctc 420
aggaaggata aagcacatgt ttgtttctgc tttcgttttc tttttctttt ttttcasgaa 480
gccttatgga gaagtatgtt tctgctttct ttcctgrgga agcctagytt ctgggccacg 540
ggactgatcc tgtctacatc ctctttccct ccattctcca tcgtgtctct nccccgtct 600
caccccaccc gtgcccctct ytgsctcagc ttcccctctt cccctgcagt gagtttcctg 660
cgcagcggca ctaagctcat cttccgccgg aggcctaggc agaaggaagc tggcctgagc 720
caatcacacg atgacctctc caacgcaacg gccacgccca gtgtccgaaa gaaggccggc 780
agcttttctc gccgccttat caagcgcttt tccttcaaat ccaaacccaa ggccaatggt 840
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tccccacctc cccttccata cccccttcctg gatctccagt gcctgggcca ggaaagccct 960
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tgggagggag aggagggccc tgtccggcat gtgtgggtat tccccagaag catttgcctc 1140
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tttgggatgg ggctcccaca cctccctcag gtccccactc agaccagcac cagtgtctgc 1380
ctctgagaat gttggcagct cacagagagc agggccggcc cgggatgggg ggcaggtact 1440
ccccaccttc ctgcctcccc tcctgctcct catccctccc tcccccttta ttaccgtttt 1500
ttgtacttga tgccttctct gtgagcagtg gctctgtggg aaggagggag ccgggagcct 1560
ggtgggaagc cttccccaga gagatggctt tagggggcttt atttaaagac tgtgatgatg 1620
gagccacgca aggctgcacc tctgtgtgtt gggagacgat gatgatgtcc attgctgtgt 1680
gatggcttgg aatttaattt attaaagtca aattggagtt taaaaaaaaa aaaaaaaaaa 1740
aaattcgggg ggggcccctn acccattggc cctaaggggg gg               1782
```

<210> 234
<211> 2208
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1314)
<223> n equals a,t,g, or c

<220>
<221> misc feature

178

<220>
<221> misc_feature
<222> (2189)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2202)
<223> n equals a,t,g, or c

<400> 234
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acagggctcg gagccaagct cagagaacgc caatgacacc atcattttgc gcaacctgaa 60
cccacacagc accatggatt ccatcctggg ggccctggca ccctacgcgg tgctgtcctc 120
ctccaacgtg cgcgtcataa aggacaagca gacccaactg aaccgcggct ttgccttcat 180
ccagctctcc accatcgagg cagcccagct gctgcagatc ctgcaggccc tgcacccacc 240
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ggcctccaat gaaggcagtc gcatcagtgc tgcctctgtg gccagcactg ccattgctgc 360
ggcccagtgg gccatctcac aggcctccca aggtggggag ggtacctggg ccacctccga 420
ggagccgccg gtcgactaca gctactacca acaggatgag ggctatggca acagccaggg 480
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cccaccggct accagcccca ctgcccagga atcctacagc cagtaccctg ttcccgacgt 840
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gccgccagag cccaagagga ggaagtacgg cggcatatcc acagcctctg tagacttcga 1680
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gccagagagg gcttgaccaa atcaaattga ggtggtgact tttgttggaa aattgggctg 2100
ggatcacgtc ctgtttgta ataaaagctg aaaagtctga aaaaaaaaaa aaaaaaaac 2160
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<210> 235
<211> 2580
<212> DNA
<213> Homo sapiens

179

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2558)
<223> n equals a,t,g, or c

<400> 235
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tccagcctta tggcgaatgg ttttttggact cagtgtgctc tacttcctgt tcctggtatt 480
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ctgggagagg attatcagcc actttgatat ttttgcattt ggacatttct ggggctgggc 660
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agtcattctg gacatcctgt tgtgcaatgg cggtggcatt tggctgggca tggtcgtttg 840
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gtttgacccc aaatcttctt ttcagagagt agctggagtg taccttttca tgatcatctg 1020
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aaccccatgg ttaatggact ggtcaccagt ttttatttta ttttatgaa tctacctttc 1980
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180

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gtttttaagt taggatgctt tttaacagcc tttagaagcc gctgctgaaa ttgatactgg 2100
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gtaacctcag tctcctgtaa gacctcctac cacatggcga gtatacacca atcaggagag 2220
ggtagctgcc tgcataggag cctcgcttcc gattattccc ttcccaatat tattcatcca 2280
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aaccttgacc ttgatagttc accacctctg atggatccct gtttttaaata aaaacgattc 2520
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<210> 236
<211> 3008
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3001)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3008)
<223> n equals a,t,g, or c

<400> 236
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gtcatcactc tgttgcccag gctggaatgg tgaagtgcag tggcatgatc tcggctcagt 60
gcagcctctg tctcccgggt tcaagcgatt ctcctgcctc agcctctaaa gagtgtgagg 120
aagaggctgt ctgtgtcatt atgtgtgcgt cggtcaagta taatatccgg ggtcctgccc 180
tcatcccaag aatgaagacc aagcaccgaa tctactatat caccctcttc tccattgtcc 240
tcctgggcct cattgccact ggcatgtttc agttttggcc ccattctatc gagtcctcaa 300
atgactggaa tgtagagaag cgcacatccg tgatgtgccg gttgttaggc tgccagccga 360
cagtcccatc ccagagcggg gggatctcag ttgcagaatg cacacgtgtt ttgatgtcta 420
tcgctgtggc ttcaacccaa agaacaaaat caaggtgtat atctatgctc tgaaaaagta 480
cgtggatgac tttggcgtct ctgtcagcaa caccatctcc cgggagtata atgaactgct 540
catggccatc tcagacagtg actactacac tgatgacatc aaccgggcct gtctgtttgt 600
tccctccatc gatgtgctta accagaacac actgcgcatc aaggagacag cacaagcgat 660
ggcccagctc tctaggtggg atcgaggtac gaatcacctg ttgttcaaca tgttgcctgg 720
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tccactgtca gctgaggtgg atcttccaga gaaaggacca ggtccacggc aatacttcct 900
cctgtcatct caggtgggtc tccatcctga gtacagagag gacctagaag ccctccaggt 960
caaacatgga gagtcagtgt tagtactcga taaatgcacc aacctctcag agggtgtcct 1020
ttctgtccgt aagcgctgcc acaagcacca ggtcttcgat tacccacagg tgctacagga 1080
ggctactttc tgtgtggttc ttcgtggagc tcggctgggc caggcagtat tgagcgatgt 1140
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cagtattttg cagagcatcc cccaaagaca gattgaagaa atgcagagac aggcccggtg 1320
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caatgaccgg atctatccat atgctgccat ctcctatgaa gaatggaatg accctcctgc 1440
tgtgaagtgg ggcagcgtga gcaatccact cttcctcccg ctgatcccac cacagtctca 1500
```

181

```
agggttcacc gccatagtcc tcacctacga ccgagtagag agcctcttcc gggtcatcac 1560
tgaagtgtcc aaggtgccca gtctatccaa actacttgtc gtctggaata atcagaataa 1620
aaaccctcca gaagattctc tctggcccaa aatccgggtt ccattaaaag ttgtgaggac 1680
tgctgaaaac aagttaagta accgtttctt cccttatgat gaaatcgaga cagaagctgt 1740
tctggccatt gatgatgata tcattatgct gacctctgac gagctgcaat ttggttatga 1800
ggtctggcgg gaatttcctg accggttggt gggttacccg ggtcgtctgc atctctggga 1860
ccatgagatg aataagtgga agtatgagtc tgagtggacg aatgaagtgt ccatggtgct 1920
cactgggggca gcttttttatc acaagtattt taattacctg tatacctaca aaatgcctgg 1980
ggatatcaag aactgggtag atgctcatat gaactgtgaa gatattgcca tgaacttcct 2040
ggtggccaac gtcacgggaa aagcagttat caaggtaacc ccacgaaaga aattcaagtg 2100
tcctgagtgc acagccatag atgggctttc actagaccaa acacacatgg tggagaggtc 2160
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agctgaggct ccctttgttt tcagttccat gtaacaatct ggaaggaaac ttcacggaca 2640
ggaagactgc tggagaagag aagcgtgtta gcccatttga ggtctgggga atcatgtaaa 2700
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cagaattcgg tgcaaaagcc aaacatcttg gtgggatttg ataaatgcct tgggacctgg 2820
agtgctgggc ttgtgcacag gaagagcacc agccgctgag tcaggatcct gtcagttcca 2880
tgagctattc ctctttggtt tggcttttttg atatgattaa aattattttt tattcctttw 2940
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3000
ngggggggn                                                          3008
```

```
<210> 237
<211> 877
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (834)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (854)
<223> n equals a,t,g, or c

<400> 237
caattattga agtcaagtga tgggcacaga ggattgatag ctcaaataag gcttggtact 60
tgcccttgga aaaagtatgc taggattctg gtgggagggg tagacatata aatggataat 120
ttataatatg atgtaagtac agagagctgt gggaacataa aggaaggaaa atgaacttga 180
gtctgagact gctcacttct attagagccc tcttctgttt tgcttcatgt tcagccttca 240
ggaagaactc atttctgttg ttgacaactg aagttgtctg tcagaaagca atgttgtaag 300
gtgacgtaca gctacatatt tttcctcaaa attgaggtga aaggaatttc taaagtaggc 360
attatgttct taatttttat ctgtgaatta agccacccag ctcctcagct ctttctctgt 420
tggccctcta cttcagatta ctttctatga agacaaaaat tttcaaggcc gtcgctatga 480
```

182

```
ctgtgattgc gactgtgcag atytccacac atacctaagt cgctgcaact ccattaaagt 540
ggaaggaggc acctgggctg tttatgaaag gcccaacttt gctgggtaca tgtacatctt 600
accacaggga gagtaccctg aataccagcg ttggatgggc ctcaacgacc gcctcagctc 660
ckgcagagct gtttcatctg cctagtggag gccagtataa gattcagatc tttgagaaag 720
gggattttag tggtcagatg tatgaaacca ccgaagattg cccttccatc atggagcatt 780
tcacatgcga gagaccatcc tgtaagtgct ggaggtgtct ggattttcta tganctaccc 840
aactaccgtg gcangcagta ctcctggaca agaagga                          877
```

```
<210> 238
<211> 3039
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (3039)
<223> n equals a,t,g, or c
```

```
<400> 238
ccgatgccga cctggtcatc tgggaccccg acagcgttaa aaccatctct gccaagacac 60
acaacagctc tctcgagtac aacatctttg aaggcatgga gtgccgcggc tccccactgg 120
tggtcatcag ccaggggaag attgtcctgg aggacggcac cctgcatgtn accgaangct 180
ctggacgcta cattccccgg aagcccttcc ctgattttkt ttacaagcgt atcaaggcaa 240
ggagcaggct ggctgagctg agaggggttc ctcgtggcct gtatgacgga cccgtgtgtg 300
aagtgtctgt gacgcccaag acagtcactc cagcctcctc ggccaagacg tctcctgcca 360
agcagcaggc cccacctgtc cggaacctgc accagtctgg attcagtttg tctggtgctc 420
agattgatga caacattccc cgccgcacca cccagcgtat cgtggcgccc cccggtggcc 480
gtgccaacat caccagcctg ggctagagct cctgggctgt gccgtccact ggggactggg 540
gatgggacac ctgaggacat tctgagactt cttcttcct tccttttttt tttttgttt 600
ttttttttta agagcctgtg atagttactg tggagcagcc agttcatggg gtcccccttg 660
gggccccaca ccccgtctct caccaagagt tactgatttt gctcatccac ttccctacac 720
atctatgggt atcacaccca agactaccca ccaagctcat acagggaacc acacccaaca 780
cttagacatg cgaacaagca gcccccagcg agggtctcct tcgccttcaa cctcctagtg 840
tctgttagca tcttcctttt catgggggga gggaagataa agtgaattgc ccagagctgc 900
cttttttcttt tcttttttaaa aattttaaga agtttttcttt gtggggctgg ggaggggccg 960
gggtcaggga gagtctttttt tttttttttt tttaaatact aaattggaac atttaattcc 1020
atattaatac aaggggtttg aactggacat cctaatgatg caattacgtc atcacccagc 1080
tgattccggg tggttggcaa actcatcgtg tctgtcctga gaggctccac aatgcccacc 1140
cgcatcgcca ttctgtagtc ttcagggtca gctgttgata aaggggcagg cttgcgttat 1200
tggcctagat tttgctgcag attaaatcct ttgaggattc tcttctcttt taccattttt 1260
ctgcgtgctc tcactctctc tttctctctc tagcttttta attcatgaat attttcgtgt 1320
```

183

```
ctgtctctct ctctctctgt gtttcctcca gcccttgtct cggagacggt gttttcctcc 1380
cttgccccat tatcttttca cctcccaggt ctaccatttc atggtggtcg ttgggtccgc 1440
ctaaaggatt tgagcgtttg ccattgcaag catagtgctg tgtcatcctg gtccatgtag 1500
gactggtgct aaccacctgc catcatgagg atgtgtgcta gagtgtggga ccctggccaa 1560
gtgcaggaat gggccatgcc gtctcaccca cagtatcaca ygtggaaccg cagacagggc 1620
ccagaagctt tagaggtatg aggctgcaga accggagaga ttttcctctg tgcagtgctc 1680
tctggctaaa gtcacggtca aacctaaaca ccgagcctca ttaacccaag tgaaccaacc 1740
aaagtcacca gttcagaagt gctaagctaa taggagtctg acccgagggc ctgctgcttc 1800
ctggttaagt atcttttgag attctagaac acatgggagc ttttttatttt cggggaaaaa 1860
ccgtattttt ttcttgtcca attatttcta aagacacact acatagaaag aggccctata 1920
aactcaaaaa gtcattggga aacttaaagt ctattctact ttgcaagagg agaaatgtgt 1980
tttatgaacg atagatcaca tcagaactcc tgtggggagg aaaccttata aattaaacac 2040
atggcccct tagagaccac aggcgatgtc tgtctccatc cttccctctc cttttctgtc 2100
acctttcccc ctagctggct cctttggacc taccctgtc cttgctgact tgtgttgcat 2160
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cccttgtctc tctacacatt ttgcctttgg ggatctggtt ggggtttttgg gttttttttgtt 2340
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ttaatatatt tgcttttttt ctcacctgca cttagaggaa atttgaacaa gttggaaaaa 2460
aacaattttt gtttcaattc taagaaacac ttgcagctct agtattcact tgagtcttcc 2520
tgtttttcct gtaccgggtc atggtaattt ttggttgttt tggttgtttt cttaaaaaac 2580
aagttaaaac ctgacgattt ctgcaggctg tgtaagcatg tttacctgtt ggcttgcttt 2640
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ctgaataact gcagtgactt gatgctctaa aacagtgtag gayttaagaa tagatggttt 2760
ttaatcctgg aaattgtgat tgtgacccat gagtggagga actttcagtt ctaaagctga 2820
taaagtgtgt agccagaaga gtactttttt ttttgtaacc actgtcttga tggcaaaata 2880
attatggtaa aaaacaagtc tcgtgtttat tattccttaa gaactctgtg ttatattacc 2940
atggaacgcc taataaagca aaatgtggtt gtttcaaaaa aaaaaaaaaa aaaaaaaaaa 3000
aaaaaaaaaa aaaaaaaaaa aaccccgggg ggggggcccn                      3039
```

<210> 239
<211> 1992
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>

184

<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1989)
<223> n equals a,t,g, or c

<400> 239
nacactcctg annctcccta aatttaatna agctggccct ccaccgcggt ggcggccgct 60
ctagaactag tggatccccc gggctgnagg aattcggcac gagcgcggtg ctgctgcgcc 120
tgggcgatga gctggagatg atccggccca gcgtctaccg caacgtggcg cgtcagctgc 180
acatctccct gcagtctgag cctgtggtga ccgatgcgtt cctggccgtg gctggccaca 240
tcttctctgc aggcatcacg tggggcaagg tggtgtccct gtatgcggtg gccgcggggc 300
tggccgtgga ctgtgtgagg caggcccagc ctgccatggt ccacgccctc gtggactgcc 360
tgggggagtt cgtgcgcaag accctggcaa cctggctgcg gagacgcggc ggatggactg 420
atgtcctcaa gtgtgtggtc agcacagacc ctggcctccg ctcccactgg ctggtggctg 480
cactctgcag cttcggccgc ttcctgaagg ctgccttctt cgtgctgctg ccagagagat 540
gagctgccca cctggcagtg gccgcagcct ggccctctgg ccaacgcagg aggccctcag 600
cacccgaaca catcttcctc ctccccaccc gagcctggag cactctaacc ctcggagacc 660
ccctaagccc cgttcctccg cagacccagg ccctccggaa ggggtgagtg gggaggggct 720
ttcctgagcc tggagctggg ctttggggca gcctgcgacc ctccccgctt gtgtcccttc 780
tcctgtgatc tctgtgtttt ccctttttctt tctggggcca ggaagtcagg gtcaactccc 840
aggcctcaga tgcagggggcc cagaacacct gctctcacct gagccccagg tgaaggggcc 900
cgggaacacc tgctctcacc tgagccccag gtgaaggggc ccgggaacac ctgctctcac 960
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cctgagcccc aggtgaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg 1140
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ggaccggggc cggcgggctc caggccagca cacctaaccc atggatgtgg aacctacggc 1440
cgagaaggaa tgttgcatga gtcggatccc agtccattgt cagtggaggg tgaggtgac 1500
cccatctgct atttttgtgc tcatcctcat acaaccattt ggggatgtgc ctattagggc 1560
tccgtaagaa ctcagatgcc tgggaagccc agcccctcag gtgcccccac acacagcctt 1620
cccttgacgc ctacatttct aggcacatgt gaggcatctt tcctggagcc ccgagccagc 1680
cctgtccctc cccagtgcag catggcactc aggagataca ggctggacat ggggcagtcg 1740
ttctggggag gcctggccta gcagccaccc acctgagccc tcccggccag gcttcgtgct 1800
ggggtgggcc atgtgccagg acaggagggt cccggcggaa agccagcccc ggactcatcg 1860
tgacattgag atcccactgg agggtagggg tggtaataaa cttctccaaa cgatgcgttg 1920
tcattttaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aaaaaaaanc cc   1992

<210> 240

185

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<211> 497
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (476)
<223> n equals a,t,g, or c

<400> 240
ggcagaactg tctgggacag acgctgcccg gatccctgcg gctgcctgca ctctggacca 60
cgagctctga gagcagcagg ttgagggccg gtgggcagca gctcggaggc tccgcgaggt 120
gcaggagacg caggcatggc cggtgagctg actcctgagg aggaggccca gtacaaaaag 180
gctttctccg cggttgacac ggatggaaac ggcaccatca atgcccagga gctgggcgcg 240
gcgctgaagg ccacgggcaa gaacctctcg gaggcccagc taaggaaact catctccgag 300
gttgacrgcg acggcgacgg cgaaatcagc ttccaggagt tcctgacggc ggcrargaag 360
gccagggccg gcctggagga cctgcangtc gccttccgcg ccttcgacca ggatggcgac 420
ggccacatca ccgtggacga gctcaggcgg gccatkgcgg ggytggggma ccttcnagag 480
attgaccatt ttggagc                                               497

<210> 241
<211> 316
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c

<400> 241
atcgggcagc ccacacaagc ggcaaaccag aatggcactg gaaatggagc cgcagaggta 60
cgcgatgagg atcattccag gcgcgattgc actcataagc tgttccgttt tgaaaattcg 120
tgttcaacga tgnaatctgt ggataatacg cacatttcgc cggaagtggt atccggttag 180
ccaraaagca ggcaggacgt gatggatatt gtatttatag agcaactttc ggtaatcacc 240
actattggtg tttacgactg ggrrcaacya tcgaacagaa gttagtgttc gatatcgaaa 300
tggcgtgggg ntaacc                                                316

<210> 242
<211> 829
<212> DNA
```

<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (793)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (814)
<223> n equals a,t,g, or c

<400> 242
ngnntttctt cggnggggggg gaataagggg acacagctca cactatntta aggtacgcct 60
gcaggtaccg gtccggaatt cccgggtcga cccacgcgtc cggaaagaaa agaagaaaag 120
aaaaaaagat ccttcaaagg gcagatgggt agaaggcata acctctgagg gttaccatta 180
ctattatgat cttatctcag gagcatctca gtgggagaaa cctgaaggat ttcaaggaga 240
cttaaaaaag gtaattgaag catattaata gtgtttttgt tttattcttt acagtgattc 300
gtttcttagg tttttgtaga gttttgctaa gcaactttat ttacaaatac tccactccct 360
ccaccccccaa actgtgtcct ttttttttccc ataatgcttt tgttagaagg ctggatggag 420
atgaaatagt gatatctggc tgggtgcagt ggctcatgcc tgtaatccca gcactttggg 480

187

```
aggctgaggc atgtggatca caaggtcagg agttaaagac cagcctggcc aagatggtga 540
aaccctatct ctcctaaaaa ctacaaaaaa attagccagg cgcagtcgca gttgcctgta 600
atcccagcta ctcaggaggc tgagtcaggg gaatcactgg gacctggggc ggcagaggtt 660
aacagtgagc cgagattgca ccaccgcact ccagcctgga taacaaagta agactccgtc 720
tcaaaaaaaa aaaaaaaaaa agggcggccg ctctagagga tccctcgagg ggcccaagct 780
tacgcgtgca tknaacgtca tagggggctng ggcntttacc tttcccgtc               829
```

```
<210> 243
<211> 838
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (822)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (832)
<223> n equals a,t,g, or c


<400> 243
taaacccgaa gtgccaaata ataatttaaa anatgttaat tttttttggcc ncctaaattt 60
gcccttcca tccattaaaa atgtccaagt tccaagtgat atgtgcccct aatatccacc 120
ttggatgttg gtgggttttt gaattttggg gtggttaatc cagttttatt ttgaaaagac 180
gtacttgaat agttacagca tatgtttgaa caggaagtag gaacatgcat acacgaagaa 240
atgctaacgg aaggatttgt tatgtttagg atcttccctt ggaaactaaa aatagaatat 300
taatgacatt actgtttgta gaatgacata tgcagatttt ctcataagca gtcattgtgt 360
ttgccagtaa tgtttgagag acatgtaagt tgaaagtttt gctaaattat aaagctcctt 420
taattcgttg gttttttgattc tcttattctc ttgtcttttc taaatgttaa caaaatatat 480
cttaacagat tacatgaaat ttaggaatta tttaaaagtt accattagct ctaaaattaa 540
gattcggatg ctttatttat agtaactgaa gctaataatg tttttatgttt tgattttttg 600
aaatttaatt gtagaagtca ctgccttctg agtttttcaaa tagataacca ccttttaatat 660
tacactgctt ataatactaa tgtttacaga tatgtttctg tttataacca tataatacat 720
tggctttgtc atattagttt tttttgcaag tagttatgta aaagagatag ataataaaat 780
attaaataac aaaaaaaaaa raaaargctc gagtaarggc anagtggcat gngccata    838
```

```
<210> 244
<211> 2853
<212> DNA
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188

<213> Homo sapiens

<220>
<221> misc feature
<222> (2665)
<223> n equals a,t,g, or c

<400> 244
ggcacagcaa cagctctggg accatctcag gccccgctgc cctcccctag gccacaggca 60
gccccgtgtc catcttcgtc tatgatgtga agcctggcgc ggaagagcag acccaggtgg 120
ccaaagctgc cttcaagcgc ttcaaaactc tacggcaccc caacatcctg gcttacatcg 180
atggactgga gacagaaaaa tgcctccacg tcgtgacaga ggctgtgacc ccgttgggaa 240
tatacctcaa ggcgagagtg gaggctggtg gcctgaagga gctggagatc tcctgggggc 300
tacaccagat cgtgaaagcc ctcagcttcc tggtcaacga ctgcagcctc atccacaaca 360
atgtctgcat ggccgccgtg ttcgtggacc gagctggcga gtggaagctt gggggcctgg 420
actacatgta ttcggcccag ggcaacggtg ggggamctcc ccgcaaggga tccccgagct 480
tgagcagtat gaccccccgg agttggctga cagcagtggc agagtggtca gagagaagtg 540
gtcagcagac atgtggcgct tgggctgcct catttgggaa gtcttcaatg ggcccctacc 600
tcggcagca gccctacgca accctgggaa gatccccaaa acgctggtgc cccattamtg 660
taagctggtg ggagcaaacc ccaaggtgcg tcccaaccca gcccgcttcc tgcagaactg 720
ccgggcacct ggtggcttca tgagcaaccg ctttgtagaa accaacctct tcctggagga 780
gattcagatc aaagagccag ccgagaagca aaaattcttc caggagctga gcaagagcct 840
ggacgcattc cctgaggatt tctgtcggca caaggtgctg ccccagctgc tgaccgcctt 900
cgagttcggc aatgctgggg ccgttgtcct cacgcccctc ttcaaggtgg gcaagttcct 960
gagcgctgag gagtatcagc agaagatcat ccctgtggtg gtcaagatgt tctcatccac 1020
tgaccgggcc atgcgcatcc gcctcctgca gcagatggag cagttcatcc agtaccttga 1080
cgagccaaca gtcaacaccc agatcttccc ccacgtcgta catggcttcc tggacaccaa 1140
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gccccacaga tgtatttatt gtacaaacca tgtgagcccg gccgcccagc caggccatct 2460
cacgtgtaca taatcagagc cacaataaat tctatttcac accccttgtg ccgggctcag 2520
tctagcccct gggaggcggc tggggtctgg cgccgccctc gcagcccgcg cccacgtcag 2580

189

```
acgtgaacat caatttgctt cgaaagccaa gggtaaagag gcacgatytg atttatcagt 2640
ttctaggaaa cacctctggg agganagcag gcagcgcccr ccggagacct tacaaccgcc 2700
cgctaaccgg ggagggggggc cggtaggggc gcctcgggty tcaaggcgcc gggagggtct 2760
wgcggccctg aaggtccctk ggtccgagcc acaagtcggg gcagaagtga ggccgagctc 2820
gcggaaatcc ctcaagtgat caccgaggtc tgg                                  2853
```

```
<210> 245
<211> 1197
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1193)
<223> n equals a,t,g, or c

<400> 245
gctcgtgccg cggcctgctt ctacctggct gagatcacgc tggccctggg ccatctccac 60
tcccagggca tcatctaccg ggacctcaag cccgagaaca tcatgctcag cagccagggc 120
cacatcaaac tgaccgactt trgactctgc aaggagtcta tccatgaggg cgccgtcact 180
cacaccttct gcggcaccat tgagtacatg gcccctgnag attctggtgc gcagtggcca 240
caaccgggct gtggactggt ggagcctggg ggccctgatg tacgacatgc tcactggatc 300
gccgcccttt accgcagaga accggaagaa aaccatggat aagatcatca ggggcaagct 360
ggcactgccc ccctacctca ccccagatgc ccgggacctt gtcaaaaagt ttctgaaacg 420
gaatcccagc cagcggattg ggggtggccc aggggatgct gctgatgtgc agagacatcc 480
ctttttccgg cacatgaatt gggacgacct tctggcctgg cgtgtggacc ccccttcag 540
gccctgtctg cagtcagagg aggacgtgag ccagtttgat acccgcttca cacggcagac 600
gccggtggac agtcctgatg acacagccct cagcgagagt gccaaccagg ccttcctggg 660
cttcacatac gtggcgccgt ctgtcctgga cagcatcaag gagggcttct ccttccagcc 720
caagctgcgc tcacccaggc gcctcaacag tagccccccgg gcccccgtca gcccctcaa 780
gttctcccct tttgagggggt ttcggcccag ccccagcctg ccggagccca cggagctacc 840
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cccctcaggg accaagaagt ccaagagggg ccgtgggcgt ccagggcgct aggaagccgg 960
gtggggggtga gggtagccct tgagccctgt ccctgcggct gtgagagcag caggaccctg 1020
ggccagttcc agagacctgg gggtgtgtct gggggtgggg tgtgagtgcg tatgaaagtg 1080
tgtgtctgct ggggcagctg tgccctgaa tcatgggcac ggaggccgcc cgccrmgccc 1140
cgcgctcaac tgctcccgtg gaagattaaa gggctgaatc atgaaaaaaa aanaaaa     1197
```

```
<210> 246
<211> 848
<212> DNA
<213> Homo sapiens

<400> 246
ggcacgagga gagagacctg gcggccgggc agcatggcgg ggctggagct cttgtcggac 60
cagggctacc gggtggacgg gcggcgcgcc ggggagctgc gcaagatcca ggcgcggatg 120
```

190

```
ggcgtgttcg cgcaggctga cggctcggcc tacattgagc agggcaacac caaggcactg 180
gctgtggtct acggcccgca cgagatccgg ggctcccggg ctcgagccct gccggacagg 240
gccctagtga actgtcaata tagttcagcg accttcagca caggtgagcg caagcracgg 300
ccacatgggg accgtaagtc ctgtgagatg ggcctgcagc tccgccagac tttcgaagca 360
gccatcctca cacagctgca cccacgctcc cagattgata tctatgtgca ggtgctacag 420
gcagatggtg ggacctatgc agcttgtgtg aatgcagcca cgctggcagt gctggatgcc 480
gggataccca tgagagactt tgtgtgtgcg tgctcagctg gcttcgtgga cggcacagcc 540
ctggcggacc tcagccatgt ggaggaagca gctggtggcc cccagctggc cctggccctg 600
ctgccagcct caggacagat tgcgctgctt gagatggatg cccggctgca cgaggaccac 660
ctggagcggg tgttggaggc tgctgcccag gctgcccgag atgtgcacac cctcttagat 720
cgagtggtcc ggcagcatgt gcgtgaggcc tctatcttgc tgggggactg accacccagc 780
cacccatgtc cagaataaaa ccctcctctg cccamaaaaa aaaaaaaaaa aaaaaaaaaa 840
aaaaaaaa                                                         848


<210> 247
<211> 1336
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1336)
<223> n equals a,t,g, or c

<400> 247
ccccgcgggg acaaggcccg gacggngccg ccggccgcca gcgcccgccc gtctcgcagc 60
aagagaggtg gagaagagcg agtacttgag aaagaagagg aagaagatga tgatgaagat 120
gaagatgaag aagatgatgt gtcagagggc tctgaagtgc ccgagagtga ccgtcctgca 180
ggtgcccagc accaccagct taacggcgag cggggacctc agagtgccaa ggagagggtc 240
aaggagtgga ccccctgcgg accgcaccag ggccaggatg aagggcgggg gccagccccg 300
ggcagcggca cccgccaggt gttctccatg gcagccatga acaaggaagg gggaacagct 360
tctkttgcca ccgggccaga ctccccgtcc cccgtgcctt tgcccccagg caaaccagcc 420
ctacctgggg ccgacgggac cccctttggc tgtcctcccg ggcgcaaaga gaagccatct 480
gatcccgtcg agtggaccgt gatggatgtc gtcgaatatt ttactgaggc tggattcccg 540
gagcaggcga cagttttcca agagcaggaa attgatggca aatctttgct gctcatgcag 600
cgcacagatg tgctcaccgg cctgtccatc cgcctcgggc cagccctgaa aatctacgag 660
caccacatca aggtgcttca gcaaggccac tttgaggatg atgaccccga tggcttctta 720
ggctgagcgc ccagcctcac ccctgcccca gcccattccg gcccccatct cacccaagat 780
cccccagagt ccaggagctg gacggggaca ccctcagccc tcataacaga ttccaaggag 840
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agcacgtcgg tgtggggagg ggattgctcc ttaaacccca ggtggctgac cctccccacc 960
cagtccagga cattttagga aaaaaaaaat gaaatgtggg gggcttctca tctccccaag 1020
atcctcttcc gttcagccag atgtttcctg tataaatgtt tggatctgcc tgtttatttt 1080
ggtgggtggt ctttcctccc tcccctacca cccatgcccc ccttctcagt ctgccctgg 1140
cctccagccc ctaggggact agctgggttg gggttcctcg ggcctttct ctcctccctc 1200
ttttctttct gttgattgtc gctccagctg gctgtattgc tttttaatat tgcaccgaag 1260
```

191

```
ktttttttaaa taaaatttta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1320
aaaaaaaaaa aaaaan                                                   1336


<210> 248
<211> 1076
<212> DNA
<213> Homo sapiens


<400> 248
gccggagaga gcagttctcc cgggcacctg tgtcagccct gccccttgcc cctaaccacc 60
tgggtaagtc acaggcggtg gtgctgtggt tctgggggca gagtcccatg cctccaagga 120
tgtcgccatc gacatgatgg actctcggac cagccagcag ctgcagctca ttgacgagca 180
ggattcctac atccagagtc gggcagacac catgcagaac attgagtcga caattgttga 240
gttgggctcc atctttcagc agttggcaca catggttaag gaacaggagg aaaccattca 300
gaggatcgac gagaacgtgc taggagccca gctggacgtt gaggccgccc attcagagat 360
cctcaagtac ttccagtctg tcacctccaa ccggtggctc atggtcaaaa tcttcctcat 420
cctcattgtc ttcttcatca tctttgtggt cttccttgct tgaaccctct ctactctgag 480
gcactctgtt ggggtttggg accctcctgg gaaggcaagt ggccagtgct gccactgagc 540
ctgtgcaggg tacttgggag aaaggccctg tttccctgga actgctaaga atgaccactg 600
cccctgatcc cccacccctt gcctctggcc accctgtcct ccccccacca ccctcaggcc 660
tatgaaacac acaggggttct agatttgaac tctgctgtga agtgactgga agggagcaga 720
ggccagctgg gggccagtgg gggaggttgt ttccactagg agatttttat aaaccctctc 780
cagcctctcc caaaggaagc gttggcagca aagggagatg atgcccttac ccaccttcct 840
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ctttcaccat gtgaggcagg gagccctgag cccttcagct gcctgcacaa cccctgacat 960
tggctgctgg tgactcaatc tgccaaatgt gctgcagctc gttttctccc aattacagca 1020
agactgtcag cctcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa      1076


<210> 249
<211> 2425
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c


<400> 249
ccgcagcagt gcccatctcc tgaccagtgc cactgtgatc caagcagtgg gnagtgccca 60
tgcctcccca atgtccaggg ccctagctgt gaccgmtgtg cccccaactt ctggaacctc 120
accagtggcc atggttgcca gccttgtgcc tgccacccaa gccgggccag aggccmwcct 180
gcaacgagtt cacagggcag tgccactgcs gtgccggctt tggagggcgg acttgttctg 240
agtgccaaga gctccactgg ggagaccctg ggttgcagtg ccatgcctgt rattgtract 300
ctcgtggaat agatacacct cagtgtcacc gcttcacagg tcactgcagc tgccgcccag 360
ggtgtctggt gtgcgctgtg accagtgtgc ccgtggcttc tcaggaatct ttcctgcctg 420
ccatccctgc catgcatgct tcggggattg ggaccgagtg gtgcaggact tggcagcccg 480
tacacagcgc ctagagcagc gggcgcagga gttgcaacag acgggtgtgc tgggtgcctt 540
tgagagcagc ttctggcaca tgcaggagaa gctgggcatt gtgcagggca tcgtaggtgc 600
ccgcaacacc tcagccgcct ccactgcaca gcttgtggag gccacagagg agctgcggcg 660
tgaaattggg gaggccactg agcacctgac tcagctcgag gcagacctga cagatgtgca 720
```

192

```
agatgagaac ttcaatgcca accatgcact aagtggtctg gagcgagata ggcttgcact 780
taatctcaca ctgcggcagc tcgaccagca tcttgacttg ctcaaacatt caaacttcct 840
gggtgcctat gacagcatcc ggcatgccca tagccagtct gcagaggcag aacgtcgtgc 900
caataacctca gccctggcag tacctagccc tgtgagcaac tcggcaagtg ctcggcatcg 960
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tacagcagac ctagcactgg gccgggcccg gcacacacag gcagagctgc agcgggcact 1260
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ggctgatcct gatagcattg aaatggtggc cacacgggtg ctagagctct ccatcccagc 1500
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acaggcagca ctggaggagg cccagcgggc acagggtatt gcccagggtg ccatccgggg 1740
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caacttgcag gtgcagatct acaacacctg ccagtgaccc ctgcccaagg cctaccccag 2280
ttcctagcac tgccccacat gcatgtctgc ctatgcactg aagagctctt kgcccgcagg 2340
gccccaata aaccagtgtg aacccccaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2400
aaaaaaaaaa aaaaagaaa aaaaa                                       2425
```

```
<210> 250
<211> 1408
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1387)
<223> n equals a,t,g, or c

<400> 250
acgggctgt gcggagcagc tgtgcagagc tgcaggcgcg cgtcatggct gctttgagac 60
agccccaggt cgcggagtgc tggccgaggc ccggcgagcc ttccgggagg agttcggggc 120
cgagcccgag ctggccgtgt cagcgccggg ccgcgtgcaa cctcatcggg gaacacacgg 180
actacaacca gggcctggtg ctgcctatgg ctctggagct catgacggtg ctggtgggca 240
gcccccgcaa gnatgggctg gtgtctctcc tcaccacctc tgagggtgcc gatgagcccc 300
```

193

```
agcggctgca gtttccactg cccacagccc agcgctcgct ggagcctggg actcctcggt 360
gggccaacta tgtcaaggga gtgattcagt actacccagc tgcccccctc cctggcttca 420
gtgcagtggt ggtcagctca gtgcccctgg ggggtggcct gtccagctca gcatccttgg 480
aagtggccac gtacaccttc ctccagcagc tctgtccaga ctcgggcaca atagctgccc 540
gcgcccaggt gtgtcagcag gccgagcaca gcttcgcagg gatgccctgt ggcatcatgg 600
accagttcat ctcacttatg ggacagaaag gccacgcgct gctcattgac tgcaggtcct 660
tggagaccag cctggtgcca ctctcggacc ccaagctggc cgtgctcatc accaactcta 720
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tggcccgggc gctgggcaag gaaagcctcc gggaggtaca actggaagag ctagaggctg 840
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ggcgcacggc ccaggcagcg gccgccctga gacgtggcga ctacagagcc tttggccgcc 960
tcatggtgga gagccaccgc tcactcagag acgactatga ggtgagctgc ccagagctgg 1020
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gtggcttcgg tggctgcacg gtgacactgc tggaggcctc cgctgctccc cacgccatgc 1140
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gagccaaggt gctgtgcttg tgaggcaccc ccaggacagc acacggtgag ggtgcggggc 1260
ctgcaggcca gtcccacggc tctgtgcccg gtgccatctt ccatatccgg gtgctcaata 1320
aacttgtgcc tccaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380
aaaaaanaaa aagaaaaaaa aaaaaaaa                                    1408
```

```
<210> 251
<211> 494
<212> DNA
<213> Homo sapiens
```

```
<400> 251
gccggagccc acggtggtca tggctgccag agcrctctgc atgctggggc tggtcctggc 60
cttgctgtcc tccagctctg ctgaggagta cgtgggcctg tctgcaaacc agtgtgccgt 120
gccagccaag gacagggtgg actcggcta ccccccatgtc accccccaagg agtgcaacaa 180
ccggggctgc tgctttgact ccaggatccc tggagtgcct tggtgtttca agcccctgca 240
ggaagcagaa tgcaccttct gaggcacctc cagctgcccc cggccggggg atgcgaggct 300
cggagcaccc ttgcccggct gtgattgctg ccaggcactg ttcatctcag cttttctgtc 360
cctttgctcc cggcaagcgc ttctgctgaa agttcatatc tggagcctga tgtcttaacg 420
aataaaggtc ccatgctcca cccgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
aaaaaaaaaa aagg                                                  494
```

```
<210> 252
<211> 2491
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
```

<220>
<221> misc feature
<222> (2457)
<223> n equals a,t,g, or c

<400> 252
ggcggnggcg cccggncctc gcccgccacg cagccgccac cgctgctgcc gccctcggcc 60
acgggtcccg acgcgacagt gggcgggcca gcgccgaccc cgctgctgcc ccctcggcc 120
acagcctcgg tcaagatgga gccagagaac aagtacctgc ccgaactcat ggccgagaag 180
gactcgctcg accgtcctt cactcacgcc atgcagctgc tgacggcaga aattgagaag 240
attcagaaag gagactcaaa aaaggatgat gaggagaatt acttggattt attttctcat 300
aagaacatga aactgaaaga gcgagtgctg atacctgtca agcagtatcc caagttcaat 360
tttgtgggga agattcttgg accacaaggg aatacaatca aaagactgca ggaagagact 420
ggtgcaaaga tctctgtatt gggaaagggc tcaatgagag acaaagccaa ggaggaagag 480
ctgcgcaaag gtggagaccc caaatatgcc cacttgaata tggatctgca tgtcttcatt 540
gaagtctttg dacccccatg tgaggcttat gctcttatgg cccatgccat ggaggaagtc 600
aagaaatttc tagtaccgga tatgatggat gatatctgtc aggagcaatt tctagagctg 660
tcctacttga atggagtacc tgaaccctct cgtggacgtg gggtgccagt gagaggccgg 720
ggagctgcac ctcctccacc acctgttccc aggggccgtg gtgttggacc acctcggggg 780
gctttggtac gtggtacacc agtaaggga gccatcacca gaggtccac tgtgactcga 840
ggcgtgccac ccccacctac tgtgaggggt gctccagcac caagagcacg gacagcgggc 900
atccagagga tacctttgcc tccacctcct gcaccagaaa catatgaaga atatggatat 960
gatgatacat acgcagaaca aagttacgaa ggctacgaag gctattacag ccagagtcaa 1020
ggggactcag aatattatga ctatggacat ggggaggttc aagattctta tgaagcttat 1080
ggccaggacg actggaatgg gaccaggccg tcgctgaagg ccctcctgc taggccagtg 1140
aagggagcat acagagagca cccatatgga cgttattaaa aacaaacatg aggggaaaat 1200
atcagttatg agcaaagttg ttactgattt cttgtatctc ccaggattcc tgttgcttta 1260
cccacaacag acaagtaatt gtctaagtgt ttttcttcgt ggtccccttc ttctccccac 1320
cttattccat tcttaactct gcattctggc ttctgtatgt agtattttaa aatgagttaa 1380
aatagattta ggaatattga attaatttt taagtgtgta gatgcttttt tctttgttgt 1440
ttaaatataa acagaagtgt accttttata ataaaaaaaa gaagttgagt aaaaaaaaaa 1500
aacacacaaa cctgttagtt tcaaaaatga cattgcttgc ttaaaggttc tgaagtaaag 1560
gcttgttaag tttctcttag ttttgatttg aggcatcccg taaagttgta gttgcagaat 1620
cccaaactag gctacatttc aaaattcagg gctgtttaag atttaaaatc acaaacatta 1680
acggcagtag gcaccaccat gtaaaagtga gctcagacgt ctctaaaaaa tgtttccttt 1740
ataaaagcac atggcggttg aatcttaagg ttaaatttta atatgaaaga tcctcatgaa 1800
ttaaatagtt gatgcaattt ttaacgttaa ttgatataaa aaaaaaaca acaaaattag 1860
gcttgtaaaa ctgactttt cattacgtgg gttttgaaat ctagccccag acatactgtg 1920
ttgagagata cttagaggga gggagtaggt tttgaagagg ttgatggtgg tggggaggga 1980
aggcctcctg aattgagttt gatgcagagc tttttagcca tgaagaatct ttcagtcata 2040
gtactaataa ttaaattttc agtatttaaa aagacaaagt attttgtcca tttgagattc 2100
tgcactccat gaaaagttca cttggacgct ggggccaaaa gctgttgatt ttcttaagtt 2160
gacggttgtc aatatatcga actgttccca agttagtcaa gtatgtctca acactagcat 2220
gatataaaaa gggacactgc agctgaatga aaaaggaatc aaaatccact ttgtacataa 2280
gttaaagtcc taattggatt tgtaccgtcc tcccatttttg ttctcggaag attaaatgct 2340
acatgtgtaa gtctgcctaa ataggtagct taaacttatg tcaaaatgtc tgcagcagtt 2400
tgtcaataaa gtttagtcct tttttaatca aaaaaaaaaa aaaaaaaaa aggcggncgc 2460
tctagaggat ccaagcttac gaccccggca t 2491

<210> 253
<211> 1125

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<212> DNA
<213> Homo sapiens

<400> 253
ttcgtttagg tcggctggaa attatgtcct ccgtcggttt tccgcagttt ttccaccaag 60
cgagatattt ttgggagtta ttccctaaat aactgcatta tatgctcctt tcatgacgaa 120
attgctgccg tggagaagac tggaggaaac tcgaggaaga gggagaagcc gacaagtgct 180
cgacgggcta ggaactgtcc tgcttgggtg ttagcgtttc ccgycgggcc agtaaggctg 240
agtgacccgg cgtgctacta ggagaaggac gtacggtcct gctagtagag gaatatgtcg 300
agtttctcta gggcgcccca gcaatgggcc acttttgcta gaatatggta tctcttagat 360
gggaaaatgc agccacctgg caaacttgct gctatggcat ctataagact tcagggatta 420
cataaacctg tgtaccatgc actgagtgac tgtggggatc atgttgttat aatgaacaca 480
agacacattg cattttctgg aaacaaatgg gaacaaaaag tatactcttc gcatactggc 540
tacccaggtg gatttagaca agtaacagct gctcagcttc acctgaggga tccagtggca 600
attgtaaaac tagctatttta tggcatgctg ccaaaaaacc ttcacagaag aacaatgatg 660
gaaaggttgc atcttttttcc agatgagtat attccagaag atattcttaa gaatttagta 720
gaggagcttc ctcaaccacg aaaaatacct aaacgtctag atgagtacac acaagaagaa 780
atagacgcct tcccaagatt gtggactcca cctgaagatt atcggctata agagaataag 840
aattgcagaa aataacagtg aagtgattga aactttcttc tgatgagttt ctctaaccta 900
caggatggag taaaacaact gctacagttc agcacctgtt ttatgtgccg aatcactgtg 960
gggaaaggtc aggaaggtgt agtccttcaa taggaaattg taattaaaat ataattttat 1020
agaaccattt ttatgtaatc tgatttgaat gttatagttg ataataataa aatcacttac 1080
ttggttgact atttagtgtt gcatttaatg ataaaaaaca gaccc             1125
```

```
<210> 254
<211> 1409
<212> DNA
<213> Homo sapiens

<400> 254
cactttgtct tttcttaagt aattatggta tatataaggc gttgggaaaa aacattttat 60
aatgaaagta tgtagggagt caaatgctta ctgtaaatgc ataagagacg ttaaaaataa 120
cactgcactt tcaggaatgt ttgcttatgg tcctgattag aaagaaacag ttgtctatgc 180
tctgcaatgg tcaatgatga attactaatg ccttattttc taggcatata ataatagttt 240
agagaatgta gaccagataa atttgtttac tgttttaaga aaactaccag tttacttaca 300
gaagattctt ttttccaaac agtaggtttc atccaagacc atttgaagaa ctgcaaactc 360
tttctcttag aaaagaaaga gggcagccta aaataaacgc aaaatttgct tatactccat 420
cacattcaga tgtcttggtt gtgacttatt accagtgtgg cagagaaccc aagttacatt 480
ttagatcaaa atattcttta tgtaggtatt gttaaaaggc tagagcctac aagttgctct 540
tccatgcgtt ggtcaggggg ccctgaaaac actggtaata ttaagagtct ttctcagggt 600
aacttaatgt tttcttaatg aacartgttt ccagctacaa attcttycaa taaattgtct 660
tcctttttga aaagtactct catagaagaa atttagcaat ttctcgttga ctgactcagt 720
ctattttaag tattcagaaa agattttgat ccccattgag ttaatgctct gccttgaaaa 780
ttattttttct ggatccttgt tagtgataac attttttttc tactgaaggt cagaggatag 840
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aataattatt acattctaaa ttttcatcta tgagaaataa caaacaagaa gggaatagaa 1080
ttaaattggg gtataatcta atcttcattg tttaaatggt ttgccttctc accattgaag 1140
ccattttta tagcctcaga aagaggaaat aatgcctcca ccattttcta cctggtgact 1200
tgaaaattga acttttaagt taggaagaag ttagagtcag ggaacttgta taccactatc 1260
```

```
tatgcagcat tgttatagtc tgattatttc tgtgttttga atatgatttt cctaatgctc 1320
taaataaaat tttgttaaaa attaattttt tatttaatga tgtgcaaata ttgaatattt 1380
tagtatattt attaaaagtg gtagtcatt                                    1409
```

<210> 255
<211> 490
<212> DNA
<213> Homo sapiens

<400> 255
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acccacgcgt ccgcctctct gtcgtggcgc ggcttcccgc ggtcttctct gcaaatgggc 60
tccgtggcct agcgcccccg tccccgccac ccgtgatcgt gcgccgaggc ccgcgagggg 120
tcgccgccca ggccgcctgg gttccacttc cagcaacagc tcctgcagca gtaccgagtg 180
ccccggggaa gccattcccc accccccagg tctccccaag gctgacccgg gtcattggtg 240
ggccagcttc tttttcggga agtccaccct cccgttcatg gccacggtgt tggagtccgc 300
agagcactcg gaacctcccc aggcctccag cagcatgamc gcctgtggcc tggctcggga 360
agccccgagg aagcagcccg gcggtcagtc cagcamagcc agcgctgggc ccccgtcctg 420
aactgagcgg ttaacaacaa gccccaagcc tkcggaagcg ctagtycaac agagccctcc 480
gggccctttg                                                         490
```

<210> 256
<211> 1233
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (931)
<223> n equals a,t,g, or c

<400> 256
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ggcagaggtt ggctcggggc tatgagaacg tgcccattcc ctgtntcacg gtgtggatgg 60
ggagccctgc cctgaggatt acaagtacat ctcagagaac tgcgagacgt ccaccatgaa 120
catcgatcgc aacatcaccc acctgcagca ctgcacgttt gtggacgact gctctagctc 180
caactgcctg tgcggccast tcagcatccg gtgctggtat gacaaggatg ggcgattgct 240
ccaggaattt aacaagattg agcctccgct gattttcgag tgtaaccagg cgtgctcatg 300
ctggagaaac tgcaagaacc gggtcgtaca gagtggcatc aaggtgcggc tacagctcta 360
ccgaacagcc aagatgggct ggggggtccg cgccctgcag accatcccac aggggacctt 420
catctgcgag tatgtcgggg agctgatctc tgatgctgag gctgatgtga gagaggatga 480
ttcttacctc ttcgacttag acaacaagga tggagaggtg tactgcatag atgcccgtta 540
ctatggcaac atcagccgct tcatcaacca cctgtgtgac cccaacatca ttcccgtccg 600
```

```
gntcttcatg ctgcaccaag acctgcgatt tccacgcatc gccttcttca gttcccgaga 660
catccggact ggggaggagc tagggtttga ctatggcgac cgcttctggg acatcaaaag 720
caaatatttc acctgccaat gtggctctga gaagtgcaag cactcagccg aagccattgc 780
cctggagcag agccgtctgg cccgcctgga cccacaccct gagctgctgc ccgagctcgg 840
ctccctgccc cctgtcaaca catgagaacg gaccacaccc tctytcccca gcatggatgg 900
ccacagctca gccgcctcct ctgccaccag ntgctcgcag cccatgcctg ggggtgctgc 960
catcttctct ccccaccacc ctttcacaca ttcctgacca gagatcccag ccaggccctg 1020
gaggtctgac agccctccc tcccagagct ggttcctccc tgggagggca acttcagggc 1080
tggccacccc ccgtgttccc catcctcagt tgaagtttga tgaattgaag tcgggcctct 1140
atgccaactg gttcctttg ttctcaataa atgttgggtt tggtaaaaaa aaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aac                            1233
```

<210> 257
<211> 2404
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2372)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2385)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2395)
<223> n equals a,t,g, or c

<400> 257
```
cggacggtgg gacgggsaag tggggtgaa aagcggcccg acctgcttgc ggtgtagtgg 60
gcggaccgcg cggctggagg tgtgaggatc cgaacccagg ggtggggggt ggaggcggct 120
cctgcgatcg aaggggactt gagactcacc ggccgcacgc catgagggcc ctgtgggtgc 180
tgggcctctg ctgcgtcctg ctgaccttcg ggtcggtcag agctgacgat gaagttgatg 240
tggatggtac agtagaagag gatctgggta aaagtagaga aggatcaagg acggatgatg 300
aagtagtaca gagagaggaa gaagctattc agttggatgg attaaatgca tcacaaataa 360
gagaacttag agagaagtcg gaaaagtttg ccttccaagc cgaagttaac agaatgatga 420
aacttatcat caattcattg tataaaaata aagagatttt cctgagagaa ctgatttcaa 480
atgcttctga tgctttagat aagataaggc taatatcact gactgatgaa aatgctcttt 540
ctggaaatga ggaactaaca gtcaaaatta agtgtgataa ggagaagaac ctgctgcatg 600
tcacagacac cggtgtagga atgaccagag aagagttggt taaaaacctt ggtaccatag 660
ccaaatctgg acaagcgag tttttaaaca aaatgactga agcacaggaa gatggccagt 720
caacttctga attgattggc cagtttggtg tcggtttcta ttccgccttc cttgtagcag 780
ataaggttat tgtcacttca aaacacaaca cgatacccca gcacatctgg gagtctgact 840
ccaatgaatt ttctgtaatt gctgacccaa gaggaaacac tctaggacgg ggaacgacaa 900
ttacccttgt cttaaaagaa gaagcatctg attaccttga attggataca attaaaaatc 960
tcgtcaaaaa atattcacag ttcataaact ttcctattta tgtatggagc agcaagactg 1020
aaactgttga ggagcccatg gaggaagaag aagcagccaa agaagagaaa gaagaatctg 1080
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198

```
atgatgaagc tgcagtagag gaagaagaag aagaaaagaa accaaagact aaaaaagttg 1140
aagaaacact ctaggacggg gaacgacaat tacccttgtc ttaaaagaag aagcatctga 1200
ttaccttgaa ttggatacaa ttaaaaatct cgtcaaaaaa tattcacagt tcataaactt 1260
tcctatttat gtatggagca gcaagactga aactgttgag gagcccatgg aggaagaaga 1320
agcagccaaa gaagagaaag aagaatctga tgatgaagct gcagtagagg aagaagaaga 1380
agaaaagaaa ccaaagacta aaaaagttga aaaaactgtc tgggactggg aacttatgaa 1440
tgatatcaaa ccaatatggc agagaccatc aaaagaagta gaagaagatg aatacaaagc 1500
tttctacaaa tcattttcaa aggaaagtga tgaccccatg gcttatattc actttactgc 1560
tgaaggggaa gttaccttca aatcaatttt atttgtaccc acatctgctc cacgtggtct 1620
gtttgacgaa tatggatcta aaaagagcga ttacattaag ctctatgtgc gccgtgtatt 1680
catcacagac gacttccatg atatgatgcc taaatacctc aattttgtca agggtgtggt 1740
ggactcagat gatctcccct tgaatgtttc ccgcgagact cttcagcaac ataaactgct 1800
taaggtgatt aggaagaagc ttgttcgtaa aacgctggac atgatcaaga agattgctga 1860
tgataaatac aatgatactt tttggaaaga atttggtacc aacatcaagc ttggtgtgat 1920
tgaagaccac tcgaatcgaa cacgtcttgc taaacttctt aggttccagt cttctcatca 1980
tccaactgac attactagcc tagaccagta tgtggaaaga atgaaggaaa aacaagacaa 2040
aatctacttc atggctgggt ccagcagaaa agaggctgaa tcttctccat ttgttgagcg 2100
acttctgaaa aagggctatg aagttatta cctcacagaa cctgtggatg aatactgtat 2160
tcaggccctt cccgaatttg atgggaagag gttccagaat gttgccaagg aaggagtgaa 2220
gttcgatgaa agtgagaaaa ctaaggagag tcgtgaagca gttgagaaag aatttgagcc 2280
tctgctgaat tggatgaaag ataaagccct taagggcmag rtactgtggg aaatttttacc 2340
aatttgtggg aaatattagt gtccggcatt tnaggggaaa gtttntttt ggggnaacca 2400
aatt                                                                 2404
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<210> 258
<211> 2092
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c

<220>
<221> misc feature

199

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<222> (2069)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2071)
<223> n equals a,t,g, or c

<400> 258
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ccggaattcc cgggtcgacc cacgcgtccg ctgccgctcc ctttgccgcc gccttagccc 120
gggaccccgaa cccagcctct cccctacccg aacaccggcc ccggctccac cgaggcccgg 180
gtcccccagc ccgtctcgcc gccgccatgg cggaccctaa atacgccgac cttcccggca 240
ttgccaggaa tgagccagat gtttatgaaa ctagcgacct acctgaggat gatcaagcgg 300
agttcgatgc ggaggagctg acaagcacaa gtgtggaaca catcattgtc aatcctaatg 360
ctgcctatga caagttcaag gacaagagag tggggacaaa gggacttgat ttctcagatc 420
gtattggaaa aaccaagagg acaggatatg aatctggaga atatgagatg cttggagagg 480
gtctgggagt gaaggagaca ccccagcaaa agtaccagcg cctactgcat gaggtccaag 540
agctgacaac tgaagttgaa aaaatcaaga cgacagtgaa ggagtcagcc acagaggaga 600
agctgacccc tgtgttgctg gctaaacagc tggcagccct gaagcagcag ctggttgctt 660
cccacctgga gaagctgctg ggaccagatg ctgcaatcaa ccttaccgac cccgatggcg 720
ccctggctaa gcgcctacta ctgcagctgg aagcaacaaa gaacagcaaa gggggatcag 780
ggggaaaaac cactgggacc cccccagata gcagccttgt cacttatgaa ctacattctc 840
ggcctgagca ggacaagttc tctcaagctg ccaaagtcgc agaacttgaa aagcgcctga 900
cagagctgga gacagctgta cgttgtgatc aggatgctca gaatcccctt tctgcaggtc 960
tacagggagc ctgtctcatg gagactgtag agctgttgca agcaaaggtg agcgccctag 1020
accttgcagt tttggatcaa gtggaggctc ggctacagag tgtcctggga aaggtgaacg 1080
agattgccaa gcataaagcc tctgtagaag atgcagatac acaaagcaag gtgcaccagc 1140
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gacttgtcac catcaagcag ctgcacgagc aagccatgca gtttggtcag ctcctgacac 1260
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cccaggtgca gacaaccatg cgtgaaaacc tggccacagt tgagggaac tttgccagca 1380
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ctagcatccc catcccattt gacactgggg gcaagggttc ttcttgcatg tggggtttat 1560
acccctcccc tgatgaatac agagtggtag ctaggggttg gttatcatca gaaggtggtc 1620
tcccctcagg cctgggggat aaggacgtgg gcccagccac atgccaactc atgtccaata 1680
ctgctttgcc tggtgtgggg aaggattggg tcttgtcccc caacacagct tctgtggctg 1740
actgtaatac tgtacaactg tttctgacca ttaaatgctg ttgtactctg tgtggcctct 1800
gctgtgtttc ctggggagga agcagcacta ggatatagat attcattcgt cataacaggc 1860
aatctaagcc actctatact acaagagatg gatttaaatt gtaacctgtt cttaccaaag 1920
aactaaataa aaaatgagta cagagccaga gccagagttt caaaatattc tcatctgtta 1980
aattaagagt gtctcccata gaaaagcagt ggaggccca caggcaagt acaaaacaga 2040
attaaaactc aaaaaaaaaa aaaaaaaanc ncaaggggg gcccggtccc ca        2092

<210> 259
<211> 387
<212> DNA
<213> Homo sapiens

<220>
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<221> misc feature
<222> (377)
<223> n equals a,t,g, or c

<400> 259
aattcggcac gaggcttcat tctctgacct ttctctctcc tcatttcggt gcatgtcctt 60
tctgcagctg cctttcagca caggtggctg cccccaggg ccaccgcttc tttcttgatc 120
ctctttcctt aacagtgact tgggcttgag tctggcaagg aaccttgctt ttagcttcac 180
caccaaggag agagaccaaa agcctctgat ttttaatttc cataaaatgt tagaagtata 240
tatatacata tatatatttc tttaaatttt tgagtctttg atatgtctaa aatcattcct 300
ctgcctgaag cctkagtgag cacatgarga actgtgttca ttaagtgtta ttaatgttga 360
actgaaaaaa aaaaacnggg ggggccg                                      387


<210> 260
<211> 3712
<212> DNA
<213> Homo sapiens

<400> 260
tatccccgac gaccggatcc tgaggaggca gctgcggtgg cagctgctga gttctcggtg 60
aaggtatttc atttctcctg tcccctcccc tccccacccc atctattaat attattcttt 120
tgaagattct tcgttgtcaa gccgccaaag tggagagtgc gattgcagaa gggggtgctt 180
ctcgtttcag tgcttcttcg ggcggaggag gaagtagggg tgcacctcag cactatccca 240
agactgctgg caacagcgag ttcctgggga aaaccccagg gcaaaacgct cagaaatgga 300
ttcctgcacg aagcactaga cgagatgaca actccgcagc aaacaactcc gcaaacgaaa 360
aagaacgaca tgatgcaatc ttcaggaaag taagaggcat actaaataag cttactcctg 420
aaaagtttga caagctatgc cttgagctcc tcaatgtggg tgtagagtct aaactcatcc 480
ttaaaggggt catactgctg attgtggaca aagccctaga agagccaaag tatagctcac 540
tgtatgctca gctatgtctg cgattggcag aagatgcacc aaactttgat ggcccagcag 600
cagagggtca accaggacag aagcaaagca ccacattcag acgcctccta atttccaaat 660
tacaagatga atttgaaaac cgaactagaa atgttgatgt ctatgataag cgtgaaaatc 720
ccctcctccc cgaggaggag gaacagagag ccattgctaa gatcaagatg ttgggaaaca 780
tcaaattcat tggagagctt ggcaagcttg atcttattca cgaatctatc cttcataagt 840
gcatcaaaac acttttggaa aagaagaaga gagtccaact caaagatatg ggagaggatt 900
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agtccttaat ggatcagtac tttgcccgaa tgtgctcctt gatgttaagt aaggaattgc 1020
cagcaaggat tcgtttcctg ctgcaggata ccgtagagtt gcgagaacac cattgggttc 1080
ctcgcaaggc ttttcttgac aatggaccaa agacgatcaa tcaaattcgt caagatgcag 1140
taaaagatct aggggtgttt attcctgctc ctatggctca agggatgaga agtgacttct 1200
ttctggaggg accgttcatg ccacccagga tgaaaatgga tagggaccca cttggaggac 1260
ttgctgatat gtttggacaa atgccaggta gcggaattgg tactggtcca ggagttatcc 1320
aggatagatt ttcacccacc atgggacgtc atcgttcaaa tcaactcttc aatggccatg 1380
ggggacacat catgcctccc acacaatcgc agtttggaga gatggggagc aagtttatga 1440
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aaggacagtc gaaggatatg ccacctcggt tttctaagaa aggacagctt aatgcagatg 1560
agattagcct gaggcctgct cagtcgttcc taatgaataa aaatcaagtg ccaaagcttc 1620
agccccagat aactatgatt cctcctagtg cacaaccacc acgcactcaa acaccacctc 1680
tgggacagac acctcagctt ggtctcaaaa ctaatccacc acttatccag gaaaagcctg 1740
ccaagaccag caaaaagcca ccaccgtcaa aggaagaact ccttaaacta actgaaactg 1800
ttgtgactga atatctaaat agtggaaatg caaatgaggc tgtcaatggt gtaagagaaa 1860
tgagggctcc taaacacttt cttcctgaga tgttaagcaa agtaatcatc ctgtcactag 1920
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atagaagcga tgaagataaa gaaaaagcaa gttctttgat cagtttactc aaacaggaag 1980
ggatagccac aagtgacaac ttcatgcagg ctttcctgaa tgtattggac cagtgtccca 2040
aactggaggt tgacatccct ttggtgaaat cctatttagc acagtttgca gctcgtgcca 2100
tcatttcaga gctggtgagc atttcagaac tagctcaacc actagaaagt ggcacccatt 2160
ttcctctctt cctactttgt cttcagcagt tagctaaatt acaagatcga gaatggttaa 2220
cagaactttt tcaacaaagc aaggtcaata tgcagaaaat gctcccagaa attgatcaga 2280
ataaggaccg catgttggag attttggaag gaaagggact gagtttctta ttcccactcc 2340
tcaaattgga gaaggaactg ttgaagcaaa taaagttgga tccatcccct caaaccatat 2400
ataaatggat taaagataac atctctccca aacttcatgt agataaagga tttgtgaaca 2460
tcttaatgac tagcttctta cagtacattt ctagtgaagt aaacccccccc agcgatgaaa 2520
cagattcatc ctctgctcct tccaaagaac agttagagca ggaaaaacaa ctactactat 2580
ctttcaagcc agtaatgcag aaatttcttc atgatcacgt tgatctacaa gtcagtgccc 2640
tgtatgctct ccaggtgcac tgctataaca gcaacttccc aaaaggcatg ttacttcgct 2700
tttttgtgca cttctatgac atggaaatta ttgaagaaga agctttcttg gcttggaaag 2760
aagatataac ccaagagttt ccgggaaaag gcaaggcttt gttccaggtg aatcagtggc 2820
taacctggtt agaaactgct gaagaagaag aatcagagga agaagctgac taaagaacca 2880
gccaaagcct taaattgtgc aaaacatact gttgctatga tgtaactgca tttgacctaa 2940
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cataggctgt tttaagttag aaaactgaat agcaacactg aatactgtag aaatgcactt 3240
tgctcagtaa tacttgagtt gttgcaatat ttgattatcc atttggttgt tacagaaaaa 3300
ttcttaactg taattgatgg ttgttgccgt aatagtatat tgcctgtatt tctacctcta 3360
gtaatgggct ttatgtgcta gattttaata tccttgagcc tgggcaagtg cacaagtctt 3420
tttaaaagaa acatggttta cttgcacaaa actgatcagt tttgagagat cgttaatgcc 3480
cttgaagtgg tttttgtggg tgtgaaacaa atggtgagaa tttgaattgg tccctcctat 3540
tatagtattg aaattaagtc tacttaattt atcaagtcat gttcatgccc tgattttata 3600
tacttgtatc tatcaataaa cattgtgata cttgaaaaaa aaaaaaaaaa aaaaaaaaaa 3660
aaaaaaaaaa aaaaaaaaaa aaaaaaaagg aggaaaaaaa aaaaaaaaaa aa          3712
```

```
<210> 261
<211> 897
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c

<400> 261
agagctggaa ggaggaggag angaaacctc accttcaggg caaaccaggg agacccttgt 60
ccccggccaa tgtccctgct ctgcctggcg agacggtgac ctccccagtc aggctgcacc 120
ccgactacct ctccccggag gagatacaga ggcagctgca ggacatcgag aggcggctgg 180
acgccctgga gctccgcggc gtggagctgg agaagcgact gcgggcggcc gagggagatg 240
acgctgagga tagcctcatg gtggactggt tctggctcat tcacgagaag cagcttctgc 300
tgagacagga gtcagagctg atgtacaagt ccaaggccca gcgtctggag gagcagcagc 360
tggacatcga gggcgagctg cgccggctca tggccaagcc cgaggctctg aagtcactgc 420
aggagcggcg gcgggagcag gagctgctgg agcartacgt gagcaccgtg aacgaccgca 480
rtgacatcgt ggactcgctk gacgaggacc ggctccsgga acaagaggag gatcagatgc 540
```

```
tgcgggacat dattgagaag ctgggcctcc agaggaagaa gtccaagttc cgcttgtcca 600
agatctggtc accaaaaagc aaaagcagcc cctcccagta gtagccagta gggccgtggg 660
ctcggcccgg acctggcatc cggacttgga ctcggggcca tgggcttggc ccggacccgg 720
aacccggact tgtactcggg gccgtgggct cggcccggac ccggcattcg gacttggact 780
cgggaagggc ctcctgtccc tacaaggggc atgtggacag cagggacctg cgctaccgtc 840
tgtggtctca ataaagaaac cgaccacatg gaaaaaaaaa aaamaaaaaa aaaaaaa    897
```

```
<210> 262
<211> 1905
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1266)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1791)
<223> n equals a,t,g, or c

<400> 262
gctgtgatag cgcgtgagga ggcagaggcc tctggggtgg gatcgcgggc cgtaagtggc 60
tgtggagctg gggtcactgc gcggtgggac catggcctcg gagaagccgc tggcggcagt 120
cacttgtaca cgcccggtca acatcgcggt catcaagtac tggggcaagc gcgatgaaga 180
gctggttctg cccatcaact cctccctgag cgtcactctg caccaggacc agttaaaaac 240
caccacaaca gccgtcatca gcaaggactt caccgaggac cggatttggc tgaatggccg 300
ggaggaggat gtggggcagc cgmggctgca ggcctgcctg cgggagatcc gctgcctggc 360
ccggaagcgg aggaactcac gggatgggga cccgctgccc tccagcctca gctgcaaggt 420
gcacgtggca tcggtgaaca acttccccac ggctgcgggc ctggcctcct cagcggcggg 480
ctatgcctgc ctagcctaca ccctggcccg tgtctacggc gtggagagtg acctctcaga 540
agtggctcgc cggggctcag gcagcgccts ccggagcctg tatggggggct ttgtggagtg 600
gcagatggga gagcaggccg acgggaagga cagcatcgct cggcaagtgg cccccgagtc 660
acactggcct gaactccgcg tgctcatcct tgtggtgagc gctgagaaga agctgacagg 720
cagtaccgtg ggcatgcggg ccagtgtgga gaccagcccc ctgcttcggt tccgggccga 780
gtccgtggtg cccgcgcgca tggcggagat ggcccgctgc atccgggagc gagacttccc 840
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cttcccgccc atctcttacc tcaatgccat ctcctggcgc atcatccacc tggtgcaccg 960
cttcaacgcc caccacgggg acaccaaggt ggcgtacacc tttgacgcgg gccccaatgc 1020
cgtgatcttc accctggacg acactgtggc tgagtttgtg gctgctgtgt ggcacggctt 1080
tcccccaggc tcgaatggag acacgtttct gaaggggctg caggtgaggc cggcccctct 1140
ctcagctgag cttcaggctg cgctggccat ggagccgacc cccggtgggg tcaaatacat 1200
cattgtcact caggtggggc cagggcctca aatcctggat gacccctgcg cccacctcct 1260
gggtcntgac ggcctgccga agccagctgc ctgactgcct cagcagggac cgcatgccgc 1320
ttggagaagg ggtggcctcg ccggagctag ggagcggatg tggtgggctg ccggactcc 1380
tgggacatgt gggtggtggc ttgaccccgg cccatgggc agcttgctgt ggggcagtgc 1440
agggagtcct gcggccgccc aggtgtcagg agaggtcccc gccgagtgct tcagctgccc 1500
taagctgcac cagcgctttg ccaagatggg atggggaggg ggtatgagaa ctggcagagc 1560
ctcggtgcag cagggctgaa gggctttctc accccagctc tggctatgcc cagttctctg 1620
agaaaggagc tcagtgggga ggtggtccct ccagcggacc agggaagggg tcactgtgct 1680
```

```
                       t9
gggagcagcc tccttgggcc tcaggaaacc accaagtgcc tcggatggtg gctgcccacg 1740
gcgcttctgc tgagaccctg cccccggccc aggtgtctcg gagggtggct ncccacggcc 1800
tgggtgtggc tggaatggtg gcaggagtgg gcaccagtgc ggccccggtg gccatgggga 1860
ataaaccagc attgctgcca aaaaaaaaaa aaaaaaaaaa aaaaa            1905
```

<210> 263
<211> 1424
<212> DNA
<213> Homo sapiens

<400> 263
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acccacgcgt ccgaaatttc aattctcgtg gtaataccag agtagaagga gagggtgact 60
ttaccgaact gacagccatt ggggaggcag atgcgggtgt ggaggtgtgg gctgaaggta 120
gtgactgttt gattttaaaa agtgtgactg tcagttgtat ctgttgcttt tctcaatgat 180
tcaggatac aaatgggctt ctctcattca ttaaaagaaa acgcgacatc tttctaagat 240
tctctgtggg aaaatgactg tcaataaaat gcgggtttct ggccattcg tcttactttc 300
attttttgat tacaaatttc tcttgacgca cacaattatg tctgctaatc ctcttcttcc 360
tagagagaga aactgtgctc cttcagtgtt gctgccataa aggggtttgg ggaatcgatt 420
gtaaaagtcc caggttctaa attaactaaa tgtgtacaga aatgaacgtg taagtaatgt 480
ttctacaggt ctttgcaaca aactgtcact ttcgtctcca gcagagggag ctgtaggaat 540
agtgcttcca gatgtggtct cccgtgtggg gcccagcaat gggggcccct gatgccaaga 600
gctctggagg ttcttgaaag aggggacacg aaggaggagt gactgggaag cctcccatgc 660
caaggaggtg ggaggtgccc tggaaatagc tgcctcatgc cacttaggcc atgactggat 720
ttaatgtcag tggtgtgcca cagtgcagag gctagacaac tgaaaggggc taccaaggct 780
gggaaaaaaa tgcaattgtt gctgtgagtg actttgaaag actctggtgc cttgtggtgc 840
ccttctgaaa ttcaaacagt aatgcaaaag tgtctgcatt agaatttacg gtgtctaaaa 900
.ttcatgtttt taaaagagct tgcctacaga tggtttccac acttgaaatt gtgccctgcg 960
agttgcatag ctggaagttc aatgctcagt cctaccttgg ctcccattaa acatttggtg 1020
ctctgtggat tgagttgaac gtgttgaggc tttgcaattt cacttgtgtt aaaggctctg 1080
gcatttttcc atttctatgc aaatttcttt gaagcagaat tgcttgcata tttcttctct 1140
gccgtcacag aaagcagagt ttcttcaaa cttcactgag gcatcagttg ctctttggca 1200
atgtccctta accatgatta ttaactaagt ttgtggcttg agtttacaaa ttctacttgt 1260
tgcattgatg ttcccatgta gtaagtcatt tttagtttgg ttgtgaaaaa accctgggct 1320
gaagttggca tttcagttaa aagaaaaaaa gaaactagtc ccagatttga aaacttgtaa 1380
taaaattgaa actcactgga aaaaaaaaaa aaaaaaaaaa aaag            1424
```

<210> 264
<211> 1287
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (889)
<223> n equals a,t,g, or c

204

```
<220>
<221> misc feature
<222> (1196)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1229)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1284)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1287)
<223> n equals a,t,g, or c


<400> 264
tccgcgccgc ctccgccgcg gaggaagaca gcgccgcccg cgcaccgcca gcgacccccg 60
ccgcagagtc ccaccgccac aggcctcggg ccagcggcca ggagctgcct ncccccagccc 120
ccgtcccgcg gcccccagcc gcccccaacc ctgccccacg ggcccggcgc catgagtgag 180
ctggagcaac tgagacagga ggccgagcag ctccggaacc agatccggga tgcccgaaaa 240
gcatgtgggg actcaacact gacccagatc acagctgggc tggacccagt ggggagaatc 300
cagatgagga cccggaggac cctccgtggg cacctggcaa agatctatgc catgcactgg 360
gggaccgact caaggctgct ggtcagcgcc tcccaggatg ggaagctcat catctgggac 420
agctacacca ccaacaaggt ccacgccatc ccgctgcgct cctcctgggt aatgacctgt 480
gcctacgcgc cctcagggaa ctttgtggcc tgtgggggggt tggacaacat ctgctccatc 540
tacagcctca agacccgcga ggcaacgtca gggtcagccg ggagctgcct ggccacactg 600
ggtacctgtc gtgttgccgc ttcctggatg acaaccaaat catcaccagc tctggggata 660
ccacctgtgc cctgtgggac attgagacag gccagcagac agtgggtttt gctggacaca 720
gtggggatgt gatgtccctg tccctggccc ccgatggccg cacgtttgtg tcaggcgcct 780
gtgatgcctc tatcaagctg tgggacgtgc gggattccat gtgccgacag accttcatcg 840
gccatgaatc cgacatcaat gcagtggctt tcttccccaa cggctacgnc tttcaccacc 900
ggctytgacg acgccamgtg ccgcctcttc gacctgcggg ccgatcagga gctcctcatg 960
tactcccatg acaacatcat ctgtggcatc amctctgttg ccttctcgcg caggawcggc 1020
tgctgctcgc tggctacgam gacttcaact gcaacatctg ggatgccatg aagggcgacc 1080
gtgcaggagt cctcgctggc cacgacaacc gcgtgagtgc ctcggggtca ccgacgatgg 1140
catggctgtg gccacgggct cctgggactc cttcctcaag atctggaact aatggnccca 1200
accccactgg gcccaagcca ggaaggggnc ctgccttccc cggggccaag gggccttggg 1260
tccctgccct tccaaccaag tttngtn                                     1287


<210> 265
<211> 991
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
```

205

<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (966)
<223> n equals a,t,g, or c

<400> 265
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gtgggcatcc agctgttgaa taagacctgg aaggagatgc gggctacaca ggaggacttc 60
gacaaggtca tgcaggtggt gcgggagagc tggcccgcac tctggccctg aagcccactt 120
ccctggagct cttccgaacc aaggtgaatg cgctcactta tggggaggtg ctgcggctgc 180
ggcagactga acggctgcac caggagggca cactggctcc ccctatactg gagctgcggg 240
agaagctgaa gccagagctc atgggcctga tccgccagca gcgcttgctc cgcctctgtg 300
aggggacgct cttccgcaag atcagcagcc ggcggcgcca ggataagctg tggttctgct 360
gcctgtcccc caaccacaag ctgctgcagt acggagacat ggaggagggc gccagcgcct 420
naccctggag agtctgcccg agcaactccc tgtggccgac atgagggcac tcctgacagg 480
caaggactgc ccccatgtcc gggagaaggg ctccgggaag cagaacaagg acctctatga 540
gttggccttc tcaatcagct atgaccgtgg ggaggaggaa gcgtacctca acttcattgc 600
cccctccaag cgggagttct acctgtggac agatgggctc agtgccttgc tggcagtcc 660
catgggcagc gagcagacac ggctggacct ggagcagctg ctgaccatgg agaccaagct 720
gcgtctgctg gagctggaga acgtgcccat ccccgagcgg ccaccccctg tgcccccacc 780
ccccaccaac ttcaacttct gctatgactg cagcatcgct gaaccttgac agtgtggctg 840
ccatgggcca cagctgcggc cactgcagca gccatgaagg gcagtgggta gaggagtgca 900
ggcaccctga ccagcagaga ttgctgcaga aataaagtct gcttggctct tgggawaaaa 960
aaaaanaaaa aaaaaaaaa aaaaaaaaa a                                 991
```

<210> 266
<211> 2320
<212> DNA
<213> Homo sapiens

<400> 266
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tctccctccc tcctccttcc gtgtgtccct ccccgcccgg ctggaggctg ctccggaccg 60
ggacgcagag tctgcggacc cggcgccgag gcggccaccc gagacgcggc gcgcacgctc 120
cggcctgcgc ccggcccggc catggcggcc ccccgcccgt ctcccgcgat ctccgtttcg 180
gtctcggctc cggctttta cgccccgcag aagaagttcg ccctgtggt ggccccaaag 240
cccaaagtga atccttccg gcccggggac agcgagcctc ccccggcacc cggggcccag 300
cgcgcacaga tgggccgggt gggcgagatt ccccgccgc ccccggaaga ctttcccctg 360
cctccacctc cccttgctgg ggatggcgac gatgcagagg gtgctctggg aggtgccttc 420
ccgccgcccc ctcccccgat cgaggaatca tttcccctg cgcctctgga ggaggagatc 480
ttcccttccc cgccgcctcc tccggaggag gaggagggc ctgaggcccc ataccgcccc 540
caccacagcc cagggagaag gtgagcagta ttgatttgga gatcgactct ctgtcctcac 600
tgctggatga catgaccaag aatgatcctt tcaaagcccg ggtgtcatct ggatatgtgc 660
ccccaccagt ggccactcca ttcagttcca agtccagtac caagcctgca gccgggggca 720
cagcacccct gcctccttgg aagtccccctt ccagctccca gcctctgccc caggttccgg 780
ctccggctca gagccagaca cagttccatg ttcagcccca gccccagccc aagcctcagg 840
tccaactcca tgtccagtcc cagacccagc ctgtgtcttt ggctaacacc cagccccgag 900
ggcccccagc ctcatctccg gctccagccc ctaagtttc tccagtgact cctaagttta 960
ctcctgtggc ttccaagttc agtcctggag ccccaggtgg atctgggtca caaccaaatc 1020
aaaaattggg gcaccccgaa gctctttctg ctggcacagg ctccctcaa cctcccagct 1080
```

206

```
tcacctatgc ccagcagagg gagaagcccc gagtgcagga gaagcagcac cccgtgcccc 1140
caccggctca gaaccaaaac caggtgcgct cccctggggc cccagggccc ctgactctga 1200
aggaggtgga ggagctggag cagctgaccc agcagctaat gcaggacatg gagcatcctc 1260
agaggcagaa tgtggctgtc aacgaactct gcggccgatg ccatcaaccc ctggcccggg 1320
cgcagcagcc gtccgcgctc tagggcagct gttccacatc gcctgcttca cctgccacca 1380
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catgctgagg gccacgggca aggcctatca cccgcactgc ttcacctgtg tggtctgcgc 1560
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cgactaccac aagcagtacg ccccgaggtg ctccgtctgc tctgagccca tcatgcctga 1680
gcctggccga gatgagactg tgcgagtggt cgccctggac aagaacttcc acatgaagtg 1740
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cccctggac ggtcacgtgc tctgtcggaa gtgccacact gctagagccc agacctgagt 1860
gaggacaggc cctcttcaga ccgcagtcca tgccccattg tggaccaccc acactgagac 1920
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ctgagggggg caccaggttt agtgctgctg ctttcactgc tgcacccgcg ccctcggccg 2160
gccccccgag cagcctttgt actctgcttg cggagggctg ggagaccctc caggacattc 2220
ccaccctccc ccatgctgcc aagttgtagc tatagctaca aataaaaaaa aaccttgttt 2280
tccagaaaaa aaaaaaaaaa aaaaaaaaa aaaaaaaaa                       2320
```

```
<210> 267
<211> 423
<212> DNA
<213> Homo sapiens

<400> 267
aattcggcac gaggattgcc ctaccccaag tcagtgtgtg gtggcccgaa ccttaggcaa 60
acagcaaact gtcatggcca ttgctacaaa gattgcccta cagatgaact gcaagatggg 120
aggrgagctc tggagggtgg acatccccct gaagctcgtg atgatcgttg gcatcgattg 180
tkaccatgac atgacagctg ggcggaggtc aatcgcagga tttgttgcca gcatcaatga 240
agggatgacc cgctggttct cacgctgcat atttcaggat agaggacagg agctggtaga 300
tgggctcaaa gtctgcctgc aagcggctct gagggcttgg aatagctgca atgagtacat 360
gcccagccgg atcatcgtgt accgsgtggc gtaggagacg gccagytgaa aacactggtg 420
act                                                            423
```

```
<210> 268
<211> 1846
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1776)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1816)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (1832)
<223> n equals a,t,g, or c

<400> 268
cgatttatca ggtttataat gcacttcagg agaaagttca ggcagtgtgt gcagatgttg 60
aaaagagtga gcgagttgtt gaatcttgtc aggcagaagt gaacaaatta agaagacaaa 120
tcactcagag gaaaaatgaa aaggaacaag aaagaagatt gcagcaggca gtgttaagca 180
gacagatgcc gtctgaaagc ttggacccag cgttcagtcc tcggatgccg tcctctgggt 240
ttgcagctga akgcagaagt acacttggag atgcagaggc ctcggatcct cctcccctt 300
actctgattt tcacccaaac aatcaagaaa gtactttgag ccactctcgc atggaaagga 360
gtgtctttat gcctcgacct caagctgtgg gctcttccaa ttatgcttcc accagtgccg 420
gactgaagta tcctggaagt ggggctgacc ttcctcctcc ccaaagagca gctggagaca 480
gtggtgagga ttcagacgac agtgattatg aaaatttgat tgaccctaca gagccttcta 540
atagtgaata ctcacattca aaggattctc gacccatggc acatcccgac gaggacccca 600
ggaacactca gacctcccag atttaactaa acaaaagaaa ctctccacct agcactgttt 660
ttcttcattg cttactgaga gggtttttga gaacttaatc tggggggaga actgctttct 720
cagatacctt aactcccgag aagagagtcc ttgtgcacag aacttgtggg agcctccatc 780
cgctgctctt tacctttgga tacagtgtgc aagtttcatg acagaatcat taagataatc 840
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aaattcatct ttgccagaaa agaaattttg ataattccaa gaagcctgat tagaacaaat 1140
cagatatacc ttctcttgtc tgcatgactt tgtgagataa aagagagggc ttccaacttt 1200
tttctactag cttgatatgt attatcactt aaaatggttg cctttaaaaa aaaaaagtag 1260
rgatactaat taccagtaag taatcatcca aataaatacg tcataaaata aattaattat 1320
tttttcyttg atggattaca gtgactactg tgttgcactg gcacatttat ggtctctgtt 1380
ctggaatctt ggaggacaca cagcagtgga gaacagaagg agtgagtttt ataatgaaca 1440
gattccagac acggtaggtt tagctgagtt catacagagg agatataact catttagatc 1500
ttctgacaaa tcctagtgtt agttttatct gtggaggaaa gacatttaat aataaactgt 1560
ttgggaatct tggtgaataa agattcattt tcaagctgaa taaccatact tattttattt 1620
taagttgcca tttgggggaat aagtgcatcc caagagagtc tctacacatc ctggaagtcg 1680
tcaatgattt cccttggaa actactttat tttactaatt taaactattt tgtactgatg 1740
tagccctgag gtagttcatg aaaatgctgt gcactncatt ccatgggaat gaaatgttgg 1800
aaagctgatc ttttcnggat ataaaatgtt gnatgatgaa aaaaaa          1846

<210> 269
<211> 601
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (536)
<223> n equals a,t,g, or c

<220>
<221> misc feature
```

<222> (556)
<223> n equals a,t,g, or c

<400> 269
ggcacgagct ggggaggagg gggtggtgac acggtggaga caccggctag gccagggggc 60
ctgcccttgg dacaggtcca dacccatgga gccccccggg aggagcagca ggtccacagc 120
gtctcatact ctacaccagt attgctgtcc tactcaggtc cttgactcca tgaagcttac 180
cccctcaggc aggctggcag agagcaggga agaggaggag gaggaggaga ctgaggaaga 240
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aaccagatgg gcaagcatcg tgccccttcc tcccccacc ttcttcttgg aattcccatc 480
cccactgctg tctcctctgg actccagccc ctgaattaaa gaaactggag ccctangtcc 540
gactaaaatt tggganaagc aaacttggac ttggacttgg aactggatcc tcccgtaccc 600
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<210> 270
<211> 880
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (876)
<223> n equals a,t,g, or c

<400> 270
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cttgctaagt tgagatcagc tagacctgct ttcttttctc ctcagtcttg catttccctc 180
aatacaagct gcagcctctt tcctcgtttc tagtctcaga aggaaggaga gggaagccat 240
tctcctctag ggactcttca gtctcatta gatgatagtc ccttttttc tacctccata 300
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aatctattct gtatccacca ggtggcagca tcttgtcata cgtgtcagga cttaggactg 480
cggggtttag gttagatgtc acgaaaaag ctagttctgt ggtcaggcgg caccaatgag 540
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ttgaagacct actttgtcct ctacataggg tagcttctgt cagggaatct tggttcttcc 660
caagaaacac tgattttctt tcaggagac ttcatgtgtt catttatttc caccacagca 720
gattttaaga aattataata tgtaatattt gatatctata aagagtatat ctaacgtgaa 780
taaattatga agcatactaa tgagtaccta tgacccataa cacatataca ttaaaacatt 840
ttaaatacca aaaaaaaaa aaaaaaaaa aaaaanaaaa   880

<210> 271
<211> 2484
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (194)

209

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (623)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2396)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2484)
<223> n equals a,t,g, or c

<400> 271
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tgttttcaga agtttctttg ggggcaacta cattaaattc actgaggaag aggagcagct 2040
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<210> 272
<211> 751
<212> DNA
<213> Homo sapiens

<400> 272
agccaccgcg tgacccactg cccctatgcc gtggccctac ccgaggtggc cccagcccag 60
ccactcaccg aggcactgag ggctctctgc cacgtggggc tctttractt cgcctttttgt 120
gccttgtttg actgcraccg ccctgtggsg cagaagtctt gtgacctcct tctcttcctg 180
agggacaaga ttgcttccta cagcagcctg cgggaggcca ggggcagccc caacactgcc 240
tccgcagagg ccamcctgcc gaggtggcgg gcgggtgagc aggcccagcc cccaggggac 300
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tctgccactg gggctcagga ccaagggagg cagcaccatg tccttctgtg ggacactgcc 540
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<210> 273
<211> 3309
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3279)
<223> n equals a,t,g, or c

<400> 273
agaagcagga gggagaaggg cagacagggg tcggttgagc cagggtagaa accaaggggа 60
gccagggtag aaaccaaggg gtcagggctg ggctggagga cacggctgag gtcctcccaa 120
aactgggccr atgtggtgtg acatccccac cagcctcaga tgagacgggc caggacgccc 180
agccacagca agccctgtcc ctttgccgga tccccaaaca ctagagaagc tctcctaacc 240
caaggcggag aatgaaggtg gtggcggcag aggaggaggg cagcagctga gaggccaggg 300
acagggtgcc tcgccaagct gtctgaggtc tgtcccaggt ggcccaggtg gtgcaggtag 360
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gagcttttag gtgttgagat ggggcagctc tgaatcctag accctggaat agcctgtccc 480
ttttctctgg gtctcgtggt ggagccatga tctggctgc tctcttgggg acactgggtg 540
gtggttacac agttgacctc tgcctggctc ccccttggtg caactcctgc ctccatcccc 600
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<210> 274
<211> 843
<212> DNA
<213> Homo sapiens

212

<220>
<221> misc feature
<222> (780)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (833)
<223> n equals a,t,g, or c

<400> 274
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ccgtccacag ctcacgacca gatgcaccag caggagtcca catcgaggac gtcctccggg 120
cactcccacg accagtgacc aggagttaaa ctttgggatg tgcccgtgat gttggaccac 180
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tcattgcagt caacttgttc acaggggaaa ccttggaaac cacagccagc agttcagggn 780
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<210> 275
<211> 2028
<212> DNA
<213> Homo sapiens

<400> 275
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ttgaacctct ttatagcatt gatactaggt gaacagaaat tacctgacta ataatttgtc 180
taacatcata tatcagaatt ttattgtata tgatgaacaa aacttaaaat tttttaaatt 240
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atttaggaaa agttataagg tacaggttga gtatcccttt tccaaaaatg cttgggacaa 480
gaagtatttc agatttcata atttttttca aagtttggaa tatttgcatt acttacca 540
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aggtaatggt cttgattgtg atagcttcaa ggtggaacat actgtaatct ccagatgcta 780
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agtgtggagt cataaactta agttcttcat atagtgacaa gagtccttag agattgttat 900
tcaagttcct tagaaattgt tatttaggta taatatcatc ttgtctttga ctagagcttg 960
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<210> 276
<211> 1455
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (759)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1408)
<223> n equals a,t,g, or c

<400> 276
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agcgggacta tgatctcctg gtggtcggcg gggatctgg tggcctggct tgtgccaagg 180
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gcacccggtg gggcctyggc ggcacctgcg tcaacgtggg ctgcatcccc aagaagctga 300
tgcaccaggc ggcactgctg ggaggcctga tccaagatgc ccccaactat ggctgggarg 360
tggcccarcc cgtgccgcat gactggagga agatggcaga agctgttcaa aatcacgtga 420
aatccttgaa ctggggccac cgtgtccagc ttcaggacar aaaagtyaag tactttaaca 480
tcaaagccag ctttgttgac gagcacacgg tttgcggcgt tgcaaaggtg ggaaagagat 540
tctgctgtca gccgatcaca tcatcattgc tactggaggg cggccgagat accccacgca 600
catcgaaggt gccttggaat atggaatcac aagtgatgac atcttctggc tgaaggaatc 660
ccctggaaaa acgttggtgg tcggggccag ctatgtggcc tgggagtgtg ctggcttcct 720
caccgggatt gggctggaca ccaccatcat gatgcgcanc csccctccgc ggcttcgacc 780
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gagtcccaga caccagaagt ctgaatttgg agaaggctgg ggtagatact agccccgaca 1020
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214

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ctcagaagat cctggtggac tcccgggaag ccacctctgt gccccacatc tacgccattg 1080
gtgacgtggt ggaggggcgg cctgagctga cacccacagc gatcatggcc gggaggctcc 1140
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ctggggacaa gtgtg                                                   1455

<210> 277
<211> 1923
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1814)
<223> n equals a,t,g, or c

<400> 277
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cgcggcttct gtgggccgga accttaaaga tagccgcaat ggctgaaaat ggtgataatg 180
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ttgtggaagc attgagcaaa tccaaggcag aactcatgga aatcagtgaa gataaaacta 420
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taaaaaacag atctgtttat attaaaggct tcccaactga tgcaactctt gatgacataa 540
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aagcatttaa gggatcaatt tttgttgtgt ttgatagcat tgaatctgct aagaaatttg 660
tagagacccc tggccagaag tacaaagaaa cagacctgct aatactttc aaggacgatt 720
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caaaagaggg gataattcta tttaaagaaa aagccaagga agcattgggt aaagccaaag 1020
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gagaggtgga aaaagaagca ctgaagaaaa taatagaaga ccaacaagaa tccctaaaca 1140
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gaactagaat attagctatt gacgatgggc ctttcccaca ggccatttat ggtgtctcct 1800
aggctgggct ttgnatattt acacaggaaa gttgggtaac actagaaata attacttggt 1860
```

215

```
cacaaagcct tccctttttt tttccttttc gagactgagt ctcactccta tcgcgcagct 1920
gga                                                                  1923
```

<210> 278
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1297)
<223> n equals a,t,g, or c

<400> 278
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aggggaagaa ggggtgggct ccccttctgg gatccttgcc acccccctcc gcagcgcgcg 60
cggaacgaca cacacacaca cacacacaca cacacacaca cactcgcata ctcatgcaca 120
ttttccttca tttccagatc ctttatttca gagcagccca ttttcctctg gattcattga 180
tgaatacaag tacccacacc tttggccagt aatgtcagtt acctgctgca ggttctgtgt 240
atgaggcctt catgaacggt taccttctcc atacactagg gaagcatttg tcagactctg 300
cagactgggt tctagagagg cagagtcttt aagagtattc atttcttctg gaaggtggag 360
ctttacccaa agtggaagtt agccttgctc aaagatgtgt tttgtggtag gtggtaaaaa 420
taaataaata aataaataat aaaaaaagaa acatgtattg gaggtaattt gacactgctg 480
ctggcagtag ttctctattc accattttaa agcccattca ggttctctct tcctgaaaag 540
aactgattgc tgtgtttaca tgaaatgaca ttggagtcag atggtctgtt ttaaagattt 600
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aatcaaacgg tgggtttctt agtagctaaa gaagccatgt acttctagtg tgtttctcag 720
aatatcaact catgttcttc agatgctttt ctttttttaa tggtgaggga aaaggtataa 780
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aattaaattt taaggagatt cttatctaat aactttgtgt gtgcttttgg atacaggctg 1260
aggctttact cctacactgg tgctgttaat ttncacnttt caggggatgt ctgctcggct 1320
ttggctgccc tttataattt agatctgtag tttaaatgaa cattaaatga gtatttcatg 1380
```

<210> 279
<211> 1018
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (818)

216

```
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1017)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1018)
<223> n equals a,t,g, or c

<400> 279
catggccgcg ccggcccggg cctcatctcg gtgttctcga gttcccagga gctgggtgcg 60
gcgctagcgc agctggttgg cccagcgcgc asatgctgcc tggcaggggc ccgcgcccgt 120
ttcgcgctcg gcttgtcggg cgggagctcg tctcgatgct agcccgcgag ctacccgccg 180
ccgtcgcccc tgccgggcca gctagcttag cgcgctggac gctgggcttc tgcgacgagc 240
gcctcgtgcc cttcgatcac gccgagagca cgtacggcct ctaccggacg catcttctct 300
ccagactgcc gatcccagaa agccaggtga tcaccattaa ccccgagctg cctgtggagg 360
aggcggctga ggactacgcc aagaagctga gacaggcatt ccaaggggac tccatcccgg 420
ttttcgacct gctgatcctg ggggtgggcc ccgatggtca cacctgctca ctcttcccag 480
accacccct cctacaggag cgggagaaga ttgtggctcc catcagtgac tccccgaagc 540
caccgccaca gcgtgtgacc ctcacrctac ctgtcctgaa tgcagcacga actgtcatct 600
ttgtggcaac tggagaaggc aaggcagctg ttctgaagcg cattttggag gaccaggagg 660
aaaaccccgct gcccgccgcc ctggtccagc cccacaccgg gaaactgtgc tggttcttgg 720
acgaggcggc cgcccgcctc ctgaccgtgc ccttcgagaa gcattccact ttgtagctgg 780
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attaaaagga gcgttgctgg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaann 1018

<210> 280
<211> 1192
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1105)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1130)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1154)
<223> n equals a,t,g, or c
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217

<400> 280
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aacttgtctt tagccttggt gctttgatcc ttctatattt tgaccccaca ggtgtggtcc 120
ggtttactta atcaggacat gggcctaaga acaaaccttt tcccttcatg ataacatcca 180
tagacaactt attagaaggg actagagttt ttgcaaattt ccctgctgga tggggcctat 240
agctatactt agtatatgcc taaacatggt aattggatag taaatggttt tctagttcca 300
ttgctgtata tttgcctaaa tggacttgtg ttcaaattat ttcttcaatt gtcatagata 360
atcctgtacc aaatggggaa gaattaggaa ataatcatgt tgtctaatgg tactctggat 420
tcagggcagc aactgccatt taaatgttgt cttgttcatt tctaaatctg ttccatgaag 480
tttaggtttt ccctgaaact aagttgaatt atttccaaaa tgaaacaggc ttctcaggga 540
catatccact tcttcccagt ctgcctttgg attaaagcac caagcagaga ccacattaat 600
tcccttgct atactgtgat ccttagtatg ttaattctta agaaaccaac atatcactga 660
aagaaggctg gcagaacgca agtgcatttt ttcactgtgg gaagaaagat caagtgacgt 720
attatttttt cctggttgtc acttaatggg ctgagtaaaa agcttgaaaa ctcagacttt 780
cggtcttggt tctgccactc attggttatg aggaggccca gagcaggtaa gttcaccttc 840
ctggccttac tttcctgatg tgtaatacgg aattacttca cagtagcatg acagtataag 900
acaccagcag tagatacaac tatgatgaca ttccatgagt tggtattttt agttctaact 960
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ttatttttaa attttttaata ctttnggtac tccaattgtc cagtgttccn tgggtgttgt 1140
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```

<210> 281
<211> 1755
<212> DNA
<213> Homo sapiens

<400> 281
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tcactgttct tggcccttct cccgacccgt agccctgctc tgctacgact gcgtgggtga 120
agtcgtctat aaaaactcat ctctgcgcgt ctcttcgcca cattcgcttc ctgctttcgg 180
tgtgtctgtt gtgtcttgtt gcgggcaccg cagtcgccgt gaagatggcg tctaccagcc 240
gtttggatgc tcttccaaga gtcacatgtc caaaccatcc agatgcgatt ttagtggagg 300
actacagagc cggtgatatg atctgtcctg aatgtggctt ggttgtaggt gaccgggtta 360
ttgatgtggg atctgaatgg cgaactttca gcaatgacaa agcaacaaaa gatccatctc 420
gagttggaga ttctcagaat cctcttctga gtgatggaga tttgtctacc atgattggca 480
agggcacagg agctgcaagt tttgacgaat ttggcaattc taagtaccag aatcggagaa 540
caatgagcag ttctgatcgg gcaatgatga atgcattcaa agaaatcact accatggcag 600
acagaatcaa tctacctcga aatatagttg atcgaacaaa taatttattc aagcaagtat 660
atgaacagaa gagcctgaag ggaagagcta atgatgctat agcttctgct tgtctctata 720
ttgcctgtag acaagaaggg gttcctagga catttaaaga aatatgtgcc gtatcacgaa 780
tttctaagaa agaaattggt cggtgtttta aacttatttt gaaagcgcta gaaaccagtg 840
tggatttgat tacaactggg gacttcatgt ccaggttctg ttccaacctt tgtcttccta 900
aacaagtaca gatggcagct acacatatag cccgtaaagc tgtggaattg gacttggttc 960
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gacagtccta tagactgatc tatcctcgag ccccagatct gtttcctaca gacttcaaat 1140
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tgaatacaaa actttgcctg ttgtacatag cctatacaaa atgctgggtt gagcctttca 1260
tgaggaaaaa caaaagacat ggtacgcatt ccagggctga atactattgc ttggcattct 1320
gtatgtatat actagtgaaa catatttaat gatttaaatt tcttatcaaa tttcttttgt 1380
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218

```
agcaatctag gaaactgtat tttggaagat atttgaaatt atgtaattct tgaataaaac 1440
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ataatgcaaa tcattgcagc taataaagct gatagacttt atttccatta cttatatata 1560
catagttttt tattttaata aatttatgga aagagcaaaa gcttttgaga accattgtta 1620
acatcaacat catagtttcc agtttgaaag gatgtgtatg tgagatttat tatgtatatt 1680
attaaacaag aagtgatgag cttggccttg aaaggcacca gcttgagaga cattaaaatg 1740
ttctaagtaa aaaaa                                                     1755
```

<210> 282
<211> 1093
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (970)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1081)
<223> n equals a,t,g, or c

<400> 282
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gcctccgcgg atccgggccc gctcggcccn tcccatggaa ggtgctcggg tcttcggggc 120
actgggtccc atcggtccct cctcacctgg gctcaccctc gggggtctgg ccgtgagcga 180
gcaccggctc agcaacaagc tgctggcttg gagcggcgtc ctcgagtggc aggagaagcg 240
cagaccctac tctgactcca ctgcaaagct gaagcggacc ctgccctgcc aagcctacgt 300
gaaccaaggc gagaacctgg agaccgacca gtggccgcag aagctgatca tgcagctgat 360
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cttcgcgggc tgcatgctgt tcccccacat ctcccctgt gaggtgcgcg tgctcatgct 540
cctgtactcg tccaagaaga agatcttcat gggcctcatc ccctacgacc agagcggctt 600
cgtcagtgcc atccggcagg tcatcaccac ccgcaagcag gcagtgggac ctggtggtgt 660
caactcaggc ccagtccaga tcgtcaacaa caagtttctg gcatggagtg gtgtcatgga 720
gtggcaggag cccaggcctg agcccaacag tcggtccaag aggtggctgc atcccacgt 780
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ccagttccac ttcaccaagg acctggagac actgaagagc ctgtgccgga tcatggacaa 960
tggcttcgcn ggctgcgtgc acttttccta caaagcatcg tgtgagatcc gcgtgcttat 1020
gctcctgtac tcttcagaga agaaaatytt cattggcytc atcccccatg accagggcaa 1080
ntttgttcaa agg                                                      1093
```

<210> 283
<211> 1556

219

<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1324)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1339)
<223> n equals a,t,g, or c

<400> 283
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ggcacgaggg gaatcctcca cgtggctgtc ccagcacgag gaacccatgc acagtgctgc  60
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agacttgaga gagttcacat tccactgtca gcaccagcct cagcaactgt gcagagacct 180
acaggcccac agccagtggc ctgtccgcat tgccctgtgc ccacaagcaa cagtccacag 240
cccttggtgg cttctgttcc ttgtcccctc ggcttctctt cgcagccatc aggactaggt 300
ttgtgcagga aggtgatgcc cactggaact ctcctcacac ctggcagctt catggatgtt 360
gtatctgaac taaggaccag aggctgccag atgtttctgg ctcctcacgt gtccttcagg 420
acagaacaga agcacaaaga ctcagccaag agttctcttt attccctttg atcctccccc 480
aaggtgaggg cttaggcagc tgtagaaccc caggaaagaa cggaatccag gcaatctgtt 540
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cagctggagg aaaggggctc caagccttgc ttttaacacc cctgcaaaac ccccaccctc 780
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ctgtaccaca ctcccactgc tgtcaccctt cactgaagcc tcgagcctcg gtagggcctc 1500
cctcttctcc ctgtcctatc aagacttaca gcaaggtccc aggttgacag ggagac     1556
```

<210> 284
<211> 1029
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (828)
<223> n equals a,t,g, or c

220

<220>
<221> misc feature
<222> (958)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (972)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (976)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (987)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1007)
<223> n equals a,t,g, or c

<400> 284
tgatggtgtg gtccaatgag cgggtcatgg gttgggtgtc cgggctgggc tgaaggaatt 60
tgccacgaac ctcacggaga gcggggtaca cggggcactg ctcgccctgg acgagacctt 120
cgactactcc gacctggcct tgctcctgca gatccccacg cagaatgcac aggcccggca 180
gcttctggag aaggaattca gcaaccttat ctccttaggc acagacaggc ggctggacga 240
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cctccgaggc gtaactcccg actcagctga gatgttgccc cccaactttc gttcggctgc 360
agcgggagcc ctgggctctc cggggctccc tctccgcaag ctgcagccag aaggccagac 420
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tttacccgcg ggaagggggc ggggcttccc tcccgggccg catgcggnga gargctgctc 840
cctccccttt ttcctgccca gtcgcggggc ccaagtcttt ccttcttcgt ccgaaaggag 900
gggagggggga ctcgtgctac aagcctcgcc ccctgtgcca ctcagtccga cccgccgngt 960
tccggttcgc cnggtncccc cgggttnatc tggcgggcgg ggtcccnttg tgccttcccc 1020
ccgtgtttt   1029

<210> 285
<211> 1583
<212> DNA
<213> Homo sapiens

<220>

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<221> misc feature
<222> (1411)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1531)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1557)
<223> n equals a,t,g, or c


<400> 285
tgtgtctgcg ttgagggtgt tgagggtcca cgctgtgaca agtgcacgcg agggtactcg 60
ggggtcttcc ctgactgcac accctgccac cagtgctttg ctctctggga tgtgatcatt 120
gccgagctga ccaacaggac acacagattc ctggagaaag ccaaggcctt gaagatcagt 180
ggtgtgatcg ggccttaccg tgagactgtg gactcggtgg agaggaaagt cagcgagata 240
aaagacatcc tggcgcagag ccccgcagca gagccactga aaaacattgg gaatctcttt 300
gaggaagcag agaaactgat taaagatgtt acagaaatga tggctcaagt agaagtgaaa 360
ttatctgaca caacttccca aagcaacagc acagccaaag aactggattc tctacagaca 420
gaagccgaaa gcctagacaa cactgtgaaa gaacttgctg aacaactgga atttatcaaa 480
aactcagata ttcggggtgc cttggatagc attaccaagt atttccagat gtctcttgag 540
gcagaggaga gggtgaatgc ctccaccaca gaacccaaca gcactgtgga gcagtcagcc 600
ctcatgagag acagagtaga agacgtgatg atggagcgag aatcccagtt caaggaaaaa 660
caagaggagc aggctcgcct ccttgatgaa ctggcaggca agctacaaag cctagacctt 720
tcagccgstg ccgaaatgac ctgtggaaca cccccagggg cytcctgtty cgagaytgaa 780
tgtggcgggc caaactgcag aactgacgaa ggagagagga agtgtggggg gcctggctgt 840
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gtcctgagtg ccctggctga agtggaacag ctctccaaga tggtctctga agcaaaactg 960
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gttgaaagcc tttctcaagt agaggttatt cttcagcata gtgctgctga cattgccaga 1260
gctgagatgt tgttagaaga agctaaaaga gcaagcaaaa gtgcaacaga tgttaaagtc 1320
actgcagata tggtaaagga agctctggaa gaagcagaaa aggcccaggt cgcagcagag 1380
aaggcaatta aacaagcaga tgaagacatt ncaaggaacc cagaacctgy taacttccsa 1440
ttggagttct kgaaacagca gctttctgga ggaaaccttg ttcaacgcgt tcccagggca 1500
tccagcgagt ttagagagga tgtgggaaga nctttaagcg gaaagctggc ccaaaanccc 1560
gggggaggcc gaattttttg gaa                                     1583


<210> 286
<211> 1177
<212> DNA
<213> Homo sapiens


<400> 286
gctcaaaatg tttaccaatg ttttaagatg tctttatcaa gcaaccgtat cagcagagaa 60
aagayatctc aaaatgttta ccaatgtttt aagaagcttt gtgtgatatt cttccaaatg 120
```

```
tagttaccaa atataatatg gtagaaaagg ctaaatcata cttaatgagc aaattgaagt 180
aagcttttaa agtatatttc tcttttggtg aaaggccaat ggagacattg tgaatttaag 240
tgaacatttg cctcaagatg ttaactataa acacactgca tacaattttc ttctgaataa 300
caaatgaatg cttattgctg catgatgtaa gcaaaagtca ttatttttcc tattcatttg 360
aaataagtta tggcttaaaa tgctttggga gtttatttct caaaattaaa atctggtcac 420
atgagcttta gtttgttttc tggtttaaaa aataaaaagg tttctcttaa cagtatttcc 480
agtgacaatg caaggtaagt atatcaaagg aaatcaacag ttgtgcttgg gggctttttg 540
ttatgggata ttgatttctt gtttttttc cgtaacattg tctgctgcaa tttaaataaa 600
aattacgaca ttttaagata tttcatagac aaaccaaaca aaaatatatg ttttttacttt 660
aaagtgaatg ttttctctt cagctgatct aaaaatgaaa gcaaratatc ttatgtagaa 720
atattttgat aatatttta cagtgagctt tcccatgttt ttatgtctta agtttctttg 780
ctgcgtttat gtaggttgca caagaacttt tactcacttg taattgtgcc tcagacttt 840
tgaaagtcta ccttctaaat tgccccgacg atctagattc tacatgttac cattggttta 900
ttcttgtgct ttctgtattt aaaactttgg ctgtactaag caaatgcaag gttataattt 960
agctaatagt agtttacaga caattctgat gattatgatt tcatttggtt taactaagct 1020
gtactagttc atttcataag gaaatgatac tgtagacaaa tgtaaataaa gcctgtgagt 1080
caagcatcaa gtggtgtttg ttagaaataa actagagatt tttaaaaaaa aaaaaaaaa 1140
aaaaaaaaa aaaaaaaaa accccgggg ggggccc                         1177
```

```
<210> 287
<211> 506
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (481)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (494)
<223> n equals a,t,g, or c


<400> 287
acaagtagct gcagtacggt acggaattac agggtagacc caagcgtacg taaaatttaa 60
aaacaaagga ctatttaaaa atacagttta ttaacaaacg tgaactactt tctgttacat 120
taggtgttcc ctagtgtttc ttaatttctt tttagaaagt gtatttttat tagtattttt 180
ccggtgaaca gaagatttgt ttggatttaa acatttacta agacagtacc tattaggaaa 240
accaaatatt gcaaatggtc aattcgattt taatttctca aaagatactc tgttatccag 300
aagattaaaa tgcctacatt gagtgcttaa aaaaaaaaa acmactgtga tratktgagc 360
```

223

```
agaatggcca gtaagttaag cctttttgga tccnggtaat ccagggtatc catttaccat 420
ggaaagggga ttccccaaac tactggccca gagggaagtt tggtttttn aaatttaagg 480
ngggaaatt ttanccctat aaaatt                                        506


<210> 288
<211> 948
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (926)
<223> n equals a,t,g, or c


<400> 288
ttnggccgag cttgggtcat ggcggcgccg ggcgcgctgc tggtgatggg cgtgagcggc 60
tcggggaaat ccaccgtggg cgccctgctg gcatctgagc tgggatggaa attctatgat 120
gctgatgatt atcacccgga ggaaaatcga aggaagatgg gaaaaggcat accgctcaat 180
gaccaggacc ggattccatg gctctgtaac ttgcatgaca tttttactaag agatgtagcc 240
tcgggacagc gtgtggttct agcctgttca gccctgaaga aaacgtacag agacatatta 300
acacaaggaa aagatggtgt agctctgaag tgtgaggagt cgggaaagga agcaaagcag 360
gctgagatgc agctcctggt ggtccatctg agcgggtcgt ttgaggtcat ctctggacgc 420
ttactcaaaa gagagggaca ttttatgccc cctgaattat tgcagtccca gtttgagact 480
ctggagcccc cagcagctcc agaaaacttt atccaaataa gtgtggacaa aaatgtttca 540
gagataattg ctacaattat ggaaacccta aaaatgaaat gacaatgatt ttgtatcagt 600
ggtccaaaca gaactaagca taaatcattg tgccatccca aacctcgttc cagccgcctt 660
gcccatacta gattctaaat gtttctaaag gcaaacccca atgtgtcaag acagacttgt 720
ttaggtgtaa ttttaggaat tatgctggtt catcaggaag cagaggggga gtttttaaaag 780
tcaagcttaa attgaagttt aaattcatct ataaccaaat caaatgatca gaggaaattc 840
tgtaatcaat gctggaaatc gttacattgt ttagaacatt cttgctcatg cctgtatttg 900
cacaaataaa tgaaacttcg ctgtcnaaaa aaaaaaaaaa aaaaaaa     948


<210> 289
<211> 1034
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c


<400> 289
ggcacgagct cgtgccggtt tgacctggag catgggtcct ggaccaaatt gccccgcagc 60
ctgcgcatga gggataagag ggcagacttt gtggttgggt cccttggggg ccacattgtg 120
gccattgggg gccttggaaa ccagccatgt cctttgggct ctgtggagag ctttagcctt 180
```

224

```
gcacggcggc gctgggaggc attgcctgcc atgcccactg cccgctgctc ctgctctagt 240
ctgcaggctg ggccccggct gtttgttatt gggggtgtgg cccagggccc cagtcaagcc 300
gtggaggcac tgtgtctgcg tgatgggggtc tgaaggcttg gtgggagctg tccactggag 360
cagctcattg ccagangmrg ctatttctat ggctcctttt gctgctgagg acactcactg 420
tggctctgtg ggatgagaga ggcatggggg tgagcacttg aaacactgcc ttggggcctt 480
gggttagggg agcctttgtc tttagtgcag gacacacata tgcttacacc tacctttatc 540
accattcgtt catgaatcat gcctagctcc atccttgccc tgggacctac taggccttcc 600
atccaactgg gaaatgggga gaagcaaagc tggcctcatg ctcttcaggg tcagttccta 660
tctggagttg accaggccta ccccagttgc cattcctgaa aaatctcagc tgccaggctg 720
cctttagggt ccctgtagac ccaggagagt tgagagggtg ggggacacag agagaataga 780
gaggatgtgg gaactgccag agggccggag cgcaggagtt caagtggagg aatgctggct 840
ttgagccctc tacactgctg gttgtatgac cttggacaag tcacttcacc tctctgtgcc 900
tcagcatcct catctataaa tggggatctc tgaaaccttc ctaccctacc tacctcacag 960
ggctgttgtg aggacccagg gagtttggat gtggaagtaa aagtgctgct aaaacctaaa 1020
aaaaaaaaaa aaaa                                                    1034


<210> 290
<211> 3091
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c

<400> 290
cccagtagct cgtgccgctc gtgnccgcca actctcagtt tgatcttaaa gtctgaataa 60
taaaacaaat cccagcagta atacatttct taaacctcac agtgcatgat atatcttttc 120
attctgatcc tgtgtttgca aaaatataca catgtatatc atagttcctc actttttatt 180
catttgtttt cctattacct gtagtaaata tattagttag tacatggaat ttatagcatc 240
agctaccccc aggaacagca cctgacaggc gggggatttt ttttcaagtt gttctacatt 300
tgcataaatt atttctatta ttattcatgt atgttattta tttctgaatc acactagtcc 360
tgtgaaagta caactgcaag gcagaaagtg ttaggatttt gcatctaatg ttcattatca 420
tggtattgat ggacctaaga aaataaaaat tagactaagc ccccaaataa gctgcatgca 480
tttgtaacay gattagtaga tttgaatata tagatgtagt attttgggta tctaggtgtt 540
ttatcattat gtaaaggaat taaagtaaag gactttgtag ttgtttttat taaatatgca 600
tatagtagag tgcaaaaata tagcaaaaat aaaaactaaa ggtagaaaag cattttagat 660
atgccttaat ttagaaactg tgccaggtgg ccctcggaat agatgccagg cagagaccag 720
tgcctgggtg gtgcctcctc ttgtctgccc tcatgaagaa gcttccctca cgtgatgtag 780
tgccctcgta ggtgtcatgt ggagtagtgg gaacaggcag tactgttgag aggagagcag 840
tgtgagagtt tttctgtaga agcagaactg tcagcttgtg ccttgaggct tccagaacgt 900
gtcagatgga gaagtccaag tttccatgct tcaggcaact tagctgtgta cagaagcaat 960
ccagtgtggt aataaaaagc aaggattgcc tgtataattt attataaaat aaaagggatt 1020
ttaacaacca acaattccca acacctcaaa agcttgttgc attttttggt atttgaggtt 1080
tttatctgaa ggttaaaggg caagtgtttg gtatagaaga gcagtatgtg ttaagaaaag 1140
aaaaatattg gttcgcgtag agtgcaaatt agaactagaa agttttatac gattatcatt 1200
ttgagatgtg ttaaagtagg ttttcactgt aaaatgtatt agtgtttctg cattgccata 1260
gggcctggtt aaaactttct cttaggtttc aggaagactg tcacatacag taagcttttt 1320
tccttctgac ttataataga aaatgttttg aaagtaaaaa aaaaaaaatc taatttggaa 1380
atttgacttg ttagtttctg tgtttgaaat catggttcta gaaatgtaga aattgtgtat 1440
```

225

```
atcagatact catctaggct gtgtgaacca gcccaagatg accaacatcc ccacacctct 1500
acatctctgt cccctgtatc tcttcctttc taccactaaa gtgttccctg ctaccatcct 1560
ggcttgtcca catggtgctc tccatcttcc tccacatcat ggaccacagg tgtgcctgtc 1620
taggcctggc caccactccc aacttgacct agccacattc atctagagat ggttcctgat 1680
gctgggcaca gactgtgctc atggcaccca ttagaaatgc ctctagcatc tttgtatgca 1740
tcttgatttt taaaccaagt cattgtacag agcattcagt tttggctgtg gtaccaagag 1800
aaaaactaat caagaatata aaccacattc caggctgctg tttctctcc atctacaggc 1860
cacactttta ctgtatttct tcatacttga aattcattct gctattttca tatcagggta 1920
cagacttata agggtgcatg ttccttaaag gtgcataatt attcttattc cgtttgctta 1980
tattgctaca gaatgctctg ttttggtgct ttgagttctg cagacccaag aagcagtgtg 2040
gaaattcact gcctgggaca cagtcttata agaatgttgg caggtgactt tgtatcagat 2100
gttgcttctc ttttctctgt acacagattg agagttacca cagtggcctg tcgggtccac 2160
cctgtgggtg cagcacagct ctctgaaagc aagaaccttc ctacctattc taacgttttt 2220
gccctctaag aaaaatggcc tcaggtatgg tatagacata gcaagagggg aagggctgtc 2280
tcactctagc aaccatccct ccattacaca cagaaagccc tcttgaagca aaagaagaag 2340
aaagaaagaa agcttatctc taaggctact gtcttcagaa tgctctgagc tgaatgctct 2400
tgctcctttc ccaagaggca gatgaaaata tagccagttt atctataccc ttcctatctg 2460
aggaggagaa tagaaaagta gggtaaatat gtaacgtaaa atatgtcatt caaggaccac 2520
caaaacttta agtaccctat cattaaaaat ctggtttaa aagtagctca agtaagggat 2580
gctttgtgac ccagggtttc tgaagtcaga tagccattct tacctgcccc ttactctgac 2640
ttattgggaa agggagaact gcagtggtgt ttctgttgca gtggcaaagg taacatgtca 2700
gaaaattcag agggttgcat accaataatc ctttggaaac tggatgtctt actgggtgct 2760
agaatgaaaa tgtaggtatt tattgtcaga tgatgaagtt cattgttttt ttcaaaattg 2820
gtgttgaaat atcactgtcc aatgtgttca cttatgtgaa agctaaattg aatgaggcaa 2880
aaagagcaaa tagtttgtat atttgtaata cctttgtat ttcttacaat aaaaatattg 2940
gtagcaaata aaaataataa aaacaataac tttaaactgc tttctggaga tgaattactc 3000
tcctggctat tttctttttt actttaatgt aaaatgagta taactgtagt gagtaaaatt 3060
cattaaattc caagtttag caaaaaaaaa a                                 3091
```

```
<210> 291
<211> 518
<212> DNA
<213> Homo sapiens

<400> 291
aggcatgaag aagagtgtgg gtactgtttc ctccacagcg gccagagtca gggtggggag 60
tgagtccagt tgaggggggaa acagtaccag cactgcgggg catgaagaag agtgtggggc 120
tgccggtggc cgtgcagtgt gtggctctgc cctggcaaga agagttgtgt ctgcggttca 180
tgcgggaggt ggagcgactg atgacccctg aaaagcagtc atcctgatgg ctctggctcc 240
agaggacctg agactcacac tctctgcagc ccagcctagt cagggcacag ctgccctgct 300
gccacagcaa ggaaatgtcc tgcatggggc agaggcttcc gtgtcctctc ccccaacccc 360
ctgcaagaag cgccgactcc ctgagtctgg acctccatcc ctgctctggt cccctctctt 420
cgtcctgatc cctccacccc catgtggcag cccatgggta tgacatagcc aaggcccaac 480
taacagtcaa gaaacaaaaa aaaaaaaaaa aaaaattc                         518
```

```
<210> 292
<211> 498
<212> DNA
<213> Homo sapiens

<220>
```

226

```
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (475)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (489)
<223> n equals a,t,g, or c


<400> 292
ctcgtgccga attcggcacg agcaacgtcg ctccagctgc tcttgacgac tccacagata 60
ccccgaagcc atggcaagca agggcttgca ggacctgaag caacaggtgg aggggaccgc 120
ccaggaagcc gtgtcagcgg ccggagcggc agctcagcaa gtggtggacc aggccacaga 180
ggcggggcag aaagccatgg accagctggc caagaccacc caggaaacca tcgacaagac 240
tgctaaccag gcctctgaca ccttctctgg gatcgggaaa aaattcggcc tcctgaaatg 300
acagcaggga gacttgggtc ggcctcctga aatgayagca gggagacttg ggtgaccccc 360
cttccaggcg ccatctagca cagcctggcc ctgatctccg ggcagccacc acctcctcgg 420
tctgccccct cattaaaatt cacgttncca aaaaaaaaaa raaagggngg ccgcntagng 480
gntccaagnt tagttacg                                                498


<210> 293
<211> 469
<212> DNA
<213> Homo sapiens


<400> 293
ggccagccct ggggcgcctt aaaaaccgga gctggcgctt ggcakcgcca ctctgggcag 60
gatccaacgt cgctccagct gctcttgacg actccacaga taccccgaag ccatggcaag 120
caagggcttg caggacctga agcaacaggt ggaggggacc gcccaggaag ccgccatgga 180
ccagctggcc aagaccaccc aggaaaccat cgacaagact gctaaccagg cctctgacac 240
cttctctggg atygggaaaa aattcggcct cctgaaatga cagcagggag acttgggtcg 300
```

227

```
gcctcctgaa atgayagcag ggagacttgg gtgacccccc ttccaggcgc catctagcac 360
agcctggccc tgatctccgg gcagccacca cctcctcggt ctgccccctc attaaaattc 420
acgttcccaa aaaaaaaaaa aaaaaaaaag ggggggcccg gtccccatt            469
```

<210> 294
<211> 668
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (568)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (650)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (652)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (658)
<223> n equals a,t,g, or c

<400> 294
```
gcacagaagg gggaggccaa agtgggtggg agcgcgtgct gttgggagtt gcttggaggt 60
tggcggcgcg gggctgaagg ctagcaaacc gagcgatcat gtcgcacaaa caaatttact 120
attcggacaa atacgacgac gaggagtttg agtatcgaca tgtcatgctg cccaaggaca 180
tagccaagct ggtccctaaa acccatctga tgtctgaatc tgaatggagg aatcttggcg 240
ttcagcagag tcagggatgg gtccattata tgatccatga accagaacct cacatcttgc 300
tgttccggcg cccactaccc aagaaaccaa agaaatgaag ctggcaagct acttttcagc 360
ctcaagcttt acacagctgt ccttacttcc taacatcttt ctgataacat tattatgttg 420
ccttcttgtt tctcactttg atatttaaaa gatgttcaat acactgtttg aatgtgctgg 480
taactgcttt gcttcttgag tagagccacc accaccatag cccagccaga tgagtgctct 540
gtggaccaca gcctaagctg agtgtgancc cagaagccac gatgtgctct gtatccagac 600
acacttggca gatggaggaa gcatctgatt gagacatggt gtacaggtcn gnaatgcngt 660
ttgttttc                                                     668
```

<210> 295
<211> 1400
<212> DNA
<213> Homo sapiens

<400> 295
```
gctttgtcct ccagtggctg gtaggcagtg gctgggaggc agcggcccaa ttagtgtcgt 60
gcggcccgtg gcgaggcgag gtccggggag cgagcgagca agcaaggcgg gaggggtggc 120
```

228

```
cggagctgcg gcggctggca caggaggagg agcccgggcg ggcgaggggc ggccggagag 180
cgccagggcc tgagctgccg gagcggcgcc tgtgagtgag tgcagaaagc aggcgcccgc 240
gcgctagccg tggcaggagc agcccgcacg ccgcgctctc tccctgggcg acctgcagtt 300
tgcaatatga ctttggagga attctcggct ggagagcaga agaccgaaag gatggataag 360
gtgggggatg ccctggagga agtgctcagc aaagccctga gtcagcgcac gatcactgtc 420
ggggtgtacg aagcggccaa gctgctcaac gtcgaccccg ataacgtggt gttgtgcctg 480
ytggcggcgg acgaggacga cgacagagat gtggctctgc agatccactt caccctgatc 540
caggcgtttt gctgcgagaa cgacatcaac atcctgcgcg tcacaacccg ggccggctgg 600
cggastcctg ctcttggaga ccgacgctgg ccccgcggcg agcgagggcg ccgagcagcc 660
cccggacctg cactgcgtgt ggtgacgaat ccacattcat ctcaatggaa ggatcctgcc 720
ttaagtcaac ttatttgttt ttgccgggaa agtcgctaca tggatcaatg ggttccagtg 780
attaatctcc ctgaacggtg atggcatctg aatgaaaata actgaaccaa attgcactga 840
agtttttgaa ataccttgt agttactcaa gcagttactc cctacactga tgcaaggatt 900
acagaaactg atgccaaggg gctgagtgag ttcaactaca tgttctgggg gcccggagat 960
agatgacttt gcagatggaa agaggtgaaa atgaagaagg aagctgtgtt gaaacagaaa 1020
aataagtcaa aaggaacaaa aattacaaag aaccatgcag gaaggaaaac tatgtattaa 1080
tttagaatgg ttgagttaca ttaaaataaa ccaaatatgt taaagtttaa gtgtgcagcc 1140
atagtttggg tatttttggt ttatatgccc tcaagtaaaa gaaaagccga aagggttaat 1200
catatttgaa aaccatattt tattgtattt tgatgagata ttaaattctc aaagtttat 1260
tataaattct actaagttat tttatgacat gaaagttat ttatgctata aattttttga 1320
aacacaatac ctacaataaa ctggtatgaa taattgcatc aaaaaaaaaa aaggggggcc 1380
gctcgcgatc tagaaactag                                             1400
```

<210> 296
<211> 960
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (599)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (859)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (933)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (950)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (951)

```
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (959)
<223> n equals a,t,g, or c

<400> 296
gtcagcccga gcccgtgcrg gccctttaag ggccgggggc gtgtagcggg cccgccccct 60
ccccgcggcg cccgcagtcc gttaagtgcg agccccggcg caggggccgg atctggccgg 120
gggccggcgg cggtgtggga gcggcgcgtc atgtacacca tcaccaaggg gcccagcaag 180
ctggtcgcgc agcgccgcac aggtcccacg cagcagcagg tggagggccg gctcggcgag 240
ctcctgaaat gccggcagcc cgcgccgccg acctcgcagc ccccgcgggc gcagccyttt 300
gcgcascgcc gggaccctgg cccctgtcga gtccagggcc aaggcttgtg ttcaatcgtg 360
tgaatggccg gcgggccccc tccacgtccc catccttcga ggggacccag gagacctaca 420
cagtggccca cgaggagaat gtccgctttg tgtccgaagc ctggcagcag gtgcaacagc 480
agctggatgg tggcccagcc ggtgagggcg ggccaaggcc tgtgcagtac gtggagagga 540
cccccaatcc ccggctgcag aactttgtgc ccattgacct agacgagtgg tgggcgcanc 600
agttcctggc gagaatcacc agctgttcct agtggctgct gggagggggc gctgctacac 660
ggccgacctg tcgccaggag agaagcatgg cgccctgccc acccactgcg cctggctggg 720
tgccggccac acctgaagtg ccagcatttg gacttttgca ccttttttc ccttggcccg 780
gctgtcccaa ccaagctgcc atgccaaggg ccgaacccgt ctgacctcag ccctgctcac 840
tgtgcccagg gaccagcgna cacccctggg gctggcaggg aggagctcca ggctaataaa 900
gtggagaaac tgtcaaaaaa aaaaaaaaaa aanctcgagg gggggcccgn ncccaattnc 960

<210> 297
<211> 657
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c

<400> 297
caaaagctgg agctccaccg cggtgacgnc cgctctagaa ctagtggatc ccccgggctg 60
caggaattcg gcacgagctc gtgccngncc tttggagcag agaggaggca atggccacca 120
tggagaacaa ggtgatctgc gccctggtcc tggtgtccat gctggccctc ggcaccctgg 180
ccgaggccca gacagagacg tgtacagtgg ccccccgtga aagacagaat tgtggttttc 240
ctggtgtcac gccctcccag tgtgcaaata agggctgctg tttcgacgac accgttcgtg 300
```

230

```
gggtcccctg gtgcttctat cctaatacca tcgacgtccc tccagaagag gagtgtgaat 360
tttagacact tctgcaggga tctgcctgca tcctgacgcg gtgccgtccc cagcacggtg 420
attagtccca gagctcggct gccacctcca ccggacacct cagacacgct tctgcagctg 480
tgcctcggct cacaacacag attgactgct ctgactttga ctactcaaaa ttggcctaaa 540
aattaaaaga gatcgatatt aaaaaaaaaa gaaaggaaa aaaaagggcg gccgtctaag 600
aggatccaag cttacgtaac gcgtgcatgc gaaggtcata gctcttctat agtgtca    657
```

<210> 298
<211> 892
<212> DNA
<213> Homo sapiens

<400> 298
```
gcagccaggc tctcagggaa ggtccatgct gcttggcctg agttcaaggc tttctgcctg 60
tagcctggac tcccgtggac ccccgtgggc aggtggcttc cccgtggcat ctccacaccg 120
cctctgcctg cccctgtgga ctgatgctat cgcgcaccgt cccacgaccc caccccgagc 180
tcctgaagcc ggggtctgag cctgcatcac ctctggcctc tcatccccca ctctcctgag 240
agcagtggtc acagcggccg gccgctctgc tgagaaggca gagaggcagg ctcaggcctc 300
agcgtggaca gcagggataa ggggcacgaa ggacggggac tcggcccctt cagaattcct 360
caggactctc aggtgcagct ttgccaaaaa ggaacttttc atgtcatgca gttgagggga 420
cttagtctca atcccaggct cctcttgact ctgggcagct ttaatcaggt tgggcagcct 480
ctgctacagc gtggagtggg atggctctct tccctcagcc acgccgcttg tgaggacaga 540
ggtgggggag tgggaagtgg gaagtcacca gagaacagga gagggatttg agggcgcgac 600
cccagcgctc tccacggacc agccagaggg actggagcca ggtgtgcatg ggttcaaggc 660
cctggccctg cccagcctct gtcttgggag ctcagcccca gggttcggtc gtcagcagtt 720
tcccaagaac aagatgtgat ggcatctgct gctgaaaccc tgatgaggac caggcccccct 780
gcaccgctgt cagcctgagg aattaaagct ttggtgctgg gaaragcaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaac tc         892
```

<210> 299
<211> 1624
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1621)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1623)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1624)
<223> n equals a,t,g, or c

<400> 299
```
cccgggctgc aggaattcgg cacgagagag gaggtcccac aggctcctgc cctggrctac 60
```

```
cgagtccccc gatggtgtta tacattaaat atccaggatg gagaagccac atgctactca 120
ccgaaggagg aaattatcac agcagcctgg gcacgcgttg tgagctctcc tgtgaccggg 180
gctttcgatt gattggaagg aggtcggtgc aatgcctgcc aagccgtcgt tggtctggaa 240
ctgcctactg caggcagatg agatgccacg cactaccatt catcactagt ggcacttaca 300
cctgcacaaa tggagtgctt cttgactctc gctgtgacta cagctgttcc agtggctacc 360
acctggaagg tgatcgcagc cgaatctgca tggaagatgg gagatggagt ggaggcgagc 420
ctgtatgtgt agacatagat ccccccaaga tccgctgtcc ccactcacgt gagaagatgg 480
cagagccaga gaaattgact gctcgagtat actgggaccc accgttggtg aaagattctg 540
ctgatggtac catcaccagg gtgacacttc ggggccctga gcctggctct cactttcccg 600
aaggagagca tgtgattcgt tacactgcct atgaccgagc ctacaaccgg gccagctgca 660
agttcattgt gaaagtacaa gtgagacgct gcccaactct gaaacctccg cagcacggct 720
acctcacctg cacctcagcg ggggacaact atggtgccac ctgtgaatac cactgtgatg 780
gcggttatga tcgccagggg acaccctccc gggtctgtca gtccagccgc cagtggtcag 840
gttcaccacc aatctgtgct cctatgaaga ttaacgtcaa cgtcaactca gctgctggtc 900
tcttggatca attctatgag aaacagcgac tcctcatcat ctcagctcct gatccttcca 960
accgatatta taaaatgcag atctctatgc tacagcaatc cacctgtgga ctggatttgc 1020
ggcatgtgac catcattgaa ctggtgggac agccacctca ggaggtgggg cgcatccggg 1080
agcaacagct gtcagccaac atcatcgagg agctcaggca atttcagcgc ctcactcgct 1140
cctacttcaa catggtgttg attgacaagc agggtattga ccgagaccgc tacatggaac 1200
ctgtcacccc cgaggaaatc ttcacattca ttgatgacta cctactgagc aatcaggagt 1260
tgacccagcg tcgggagcaa agggacatat gcgagtgaac ttgagccagg gcatggttaa 1320
agtcaaggga aaagctcctc tagttagctg aaactgggac ctaataaaag gaggaaatgt 1380
tttcccacag ttctagggac aggactctga ggtgggtgag tttgacaaat cctgcagtgt 1440
ttccaggcat cctttttagga ctgtgtaata gtttccctag aagctaggta gggactgagg 1500
acaggccttg ggcagtgggt tgggggtaga agttcttcct ttcctaaccc gggcccctgc 1560
ccagctctcc aaagtctttc agaaaagtaa atcctaaatt cagtgatgaa aaaaaaaaaa 1620
nann                                                              1624
```

```
<210> 300
<211> 1969
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<400> 300
ttaatttagg tgnacactat agaagggtac gcctgcaggt taccggatcc ggaattcccg 60
ggatccggag ccgcccgaag ccggtgccgc agcccctgc gcccccggtg cccccgacat 120
gtccttccgc aaagtggtcc ggcagagcaa attccggcat gtgttcgggc agccggtcaa 180
gaacgaccag tgctatgagg acattcgcgt gtcccgtgtt acctgggaca gcaccttctg 240
cgccgtcaac cccaagttcc tggcggtgat tgtggaggcc agtggagggg gtgcctttct 300
ggtgctcccc ctaagcaaga cgggccgcat tgacaaggcc tacccgacgg tgtgtgggca 360
cacgggacct gtcctggaca tcgactggtg tcctcacaac gacgaatcat agccagcggy 420
tcggaggact gcacggtcat ggtgtggcag atcccagaga acgggctgac ctccccgctg 480
acagagccgg tggtggtact ggagggcac accaagcgag tgggcatcat cgcctggcac 540
cccacggccc gaaacgtgct gctcagtgca ggctgcgaca acgtggtact catctggaat 600
gtgggcacag cggaggagct gtaccgcctg gacagcctgc accctgacct catctacaat 660
gtcagctgga accacaatgg cagcctgttt tgctcagcat gcaaggacaa gagcgtgcgc 720
```

```
atcatcgacc cccgtcgggg caccctggtg gcagagcggg agaaggctca tgaggggggcc 780
cggcccatgc gggccatctt cctggcagat ggcaaggtgt tcaccacagg cttcagccga 840
atgagcgagc ggcagctggc gctctgggac ccagaaaacc tcgaggaacc catggccctg 900
caggaactgg actcgagcaa cggggccctg ctgcccttct acgaccccga caccagtgtg 960
gtctacgtct gcggcaaggg tgactccagc atccggtact ttgagatcac agaggagcct 1020
ccctacatcc acttcctgaa cacgttcacc agcaaggagc cgcagcgggg tatgggcagc 1080
atgcccaagc ggggcctgga ggtcagcaag tgcgagatcg cccggttcta caaactgcat 1140
gagcgcaagt gtgagcccat cgtcatgact gtgccaagaa agtcggacct cttccaggat 1200
gatctgtacc ccgacacagc cgggcccgag gcagccctgg aggctgagga gtgggtgagc 1260
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cgggacctga agatcagccg gcgcaacgtg ttgtctgaca gccggcccgc catggccccg 1380
ggctcctccc acctaggggc ccccgcctcc accaccactg ctgctgatgc cacccccagc 1440
ggcagcctgg ccagagccgg ggaggctggg aagctggagg aggtgatgca ggagctgcgg 1500
gccctgaggg cgctggtcaa ggagcagggc gaccgcatct gccgcctgga ggagcagctg 1560
ggccgcatgg agaacgggga tgcgtagggc cacagccaca cgccaccttc atctcctccg 1620
ccgcccccctt cccactcagc ttctgccagc gggtcgcacc gggctagctg gctgcccaga 1680
gcctctgagg cagcgcaggg gtcagttccc acccccaccc gtcccaggcc caggccgaag 1740
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gacctctgag ggaccatctc cccgaccact gcccagcccct ctgctccctc cccagaggag 1860
gcgggagggt gggctctata ttttcattcc aaataaaatt ctctttctaa aaaaaaaaa 1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacgga cgtcgtggg             1969
```

```
<210> 301
<211> 1882
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1840)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1849)
<223> n equals a,t,g, or c


<400> 301
ggagctctcg gcctcggctt tngacgacgg caacttctcg ctgctcatcc gcgcggtgga 60
ggagacggac gcgggggctgt acacctgcaa cctgcaccat cactactgcc acctctacga 120
gagcctggcc gtccgcctgg aggtcaccga cggccccccg gcacccccgc ctactgggac 180
```

```
ggcgagaagg aggtgctggc ggtggcgcgc ggcacccgct ytnctgacct gcgtgaaccg 240
cgggcacgtg tggaccgacc ggcacgtgga ggaggctcaa caggtggtgc actgggaccg 300
gcagccgccc ggggtcccgc acgaccgcgc ggaccgcctg ctggacctct acgcgtcggc 360
gagcgccgcg ctacgggccc ctttttctgc cgamcgcgtg gctgtgggcg cggatgcctt 420
taagcgcggt gacttctcac tgcgtatcga gccgctggag gtcgccgacg agggcaccta 480
ctcctgccac ctgcaccacc attactggcg cgcggccaca acgtcatcaa tgtcatcgtc 540
cccgagagcc gagcccactt cttccagcag ctgggctacg tgctggccac gctgctgctc 600
ttcatcctgc tactggtcac tgtcctcctg gccgcccgca ggccgcggag gctacgaata 660
ctcggaccag aagtcgggaa agtcaaaggg gaaggatgtt aacttggcgg agttcgctgt 720
ggctgcaggg gaccagatgc tttacaggag tgaggacatc cagctagatt acaaaaacaa 780
catcctgaag gagagggcgg agctggccca cagcccctg cctgccaagt acatcgacct 840
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agcagctgca cctctcctgt ctgtgctcct cggggcatct cctgatgctc cggggctcac 960
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tcagaacctg gcagccccaa aactggggtc agcctcaggg caggagtccc actcctccag 1260
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ccaccaagag ctcccccacc tgtaccacca tgtgggactc caggcaccat ctgttctccc 1440
cagggacctg ctgacttgaa tgccagccct tgctcctctg tgttgctttg ggccacctgg 1500
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tgatagtcac tgggctccct gtgacttctg accctgacac ccctcccttg gactctgcct 1620
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gagtgaagtt ggtttgggggt ggcctgtgtt gccactctca gcaccccaca tttgcatctg 1740
ctggtggacc tgccaccatc acaataaagt ccccatctga tttttaaaaa aaaaaaaaaa 1800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaan acaaaaaana aaaaaaatg 1860
ggaataaaaa taacaaaaaa at                                         1882
```

<210> 302
<211> 2804
<212> DNA
<213> Homo sapiens

<400> 302
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gattccaacg catcccagtc cctgtgtgac atcatccgcc tgagccggga gcagatgatc 60
caagtccagg acagcccaga gcctgaccaa ctgctggcca ccctggagaa gcaggagacg 120
attgagcagc tcttaagcaa catgttcgag ggggagcaga gccagtctgt catcgtcagt 180
gggatccagg tgctgctgac mctgctggag cccaggaggc cgaggtccga gtccgtgacc 240
gtgaacagct tcttcagcag tgtggatggg cagctggagc tcctggccca gggggcctgg 300
aaagcactgt gtccagtgtg ggcgccttgc acgccctacg cccgcggctc agctgcttcc 360
accagctcct gctggagcct cccaagctgg agccgctaca gatgacatgg ggcatgctgg 420
ctccgctctg gcaacacgc ggctgcacgt ggtcaagctc ctggccagtg ccctgagcgc 480
caatgatgca gycctgacgc acgagctcct ggcactggac gtgcccaaca ccatgctgga 540
cctcttcttc cattatgtct tcaacaactt cttgcatgcc caagtagagg atgcgtgag 600
caccatgctg agcttggggc cacytcctga cagcagccct gagacgccca tccaaaaccc 660
tgttgtgaaa catctgctgc agcatgccgc ctggtggagc ggatcctgac gtcctgggag 720
gagaacgacc gtgtacagtg tgcgggaggc cctcggaaag gctacatggg tcacctgaca 780
agagtggccg ktgccctggt gcagaacacg gagaagggggc ccaatgcaga gcagctgcgg 840
cagctgctga aggagctgcc cagcgagcag caggagcagt gggaagcctt cgtatcgggg 900
```

234

```
cccctggcgg agaccaacaa gaagaacatg gtggacctgg tgaacaccca ccacctacac 960
tcctccagtg acgatgagga cgaccggctc aaggagttca acttccctga ggaggctgtg 1020
ctgcagcagg ccttcatgga cttccagatg cagcgcatga cctctgcctt cattgaccac 1080
ttcggcttca atgatgagga gtttggggag caggaggaga gtgtgaacgc accttttgac 1140
aagacagcca acatcacctt ctccctcaat gctgacgatg agaaccccaa cgccaaccta 1200
cttgagatat gctacaagga ccgcatccag cagtttgatg atgatgagga agaggaggac 1260
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gacagtgagg acgaagaaga ggaggacgag gaggaggagg aagacgagga gggcattggc 1440
tgtgcagccc gtggaggggc cacccctctg tcctacccca gccctggccc tcagcctcca 1500
ggccccagct ggacagccac ctttgaccca gtgcctacag atgccccgac cagcccccga 1560
gtctccgggg aggaagagct gcacactggg cctccagccc cacaggggcc cctcagtgtg 1620
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tggcccccat tgccctcatc accctgacac ccccacattc tctcctctgg accccaggaa 2160
ggctggtgcc agggagacag gcccaaccca cccccatttg cactgagaag agaagttttg 2220
gagcgttgcc tcctagaata aagatacaga gagtcaaata gagagaatgg agagagagaa 2280
acatatatta tatattatat agagagaggg aggagagcga gagagagtga ggacaccgaa 2340
ctgggctggc ggctccaaag cacagccttc cctgttccgt cccagcggga gctggtgtta 2400
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gcccacaccc ggcctttag ctcaggtcca ccatgggggga cggcccagcg tgggtggggg 2520
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cagtccggct ctggggagca ggggcctccc cggcaacagc cccaggggcc ttgagggtct 2640
gaggtcccag ccctgttgcc aagtgacctt gtccccagct ccctcctccc aggctggtgt 2700
gagtgtgcgt gcgtttgtgc cgagcttcta tttcatattg caaatataaa taaaggaagg 2760
cagtttacga aaaaaaaaa aaaaaaaaa aaaaaaaaa aacc            2804
```

<210> 303
<211> 3859
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (581)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (889)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (890)

235

<223> n equals a,t,g, or c

<400> 303
```
aagactgcat agggctcgcc gtggggktct tcaggtgatg gcagaggagc caggcacaac 60
agggaagtaa gaggaaagca tatgtggagg catggaagga tggaagaaac agcctggaga 120
tcctgggaaa ctgctaccag ttcagagagg ggtgtggggg gttggtggca ctatgtggcg 180
cgtctgtgcg cgacgggctc agaatgtagc cccatgggcg ggactcgagg ctcggtggac 240
ggccttgcag gaggtacccg gaactccacg agtgacctcg cgatctggcc cggctcccgc 300
tcgtcgcaac agcgtgacta cagggtatgg cggggtccgg gcactgtgcg gctggacccc 360
cagttctggg gccacgccgc ggaaccgctt actgctgcag cttttggggt cgcccggccg 420
ccgctattac agtcttcccc cgcatcagaa ggttccattg ccttctcttt cccccacaat 480
gcaggcaggc amcatagccc gttgggaaaa aaaagagggg gacaaaatca atgaaggtga 540
cctaattgca gaggttgaaa ctgataaagc cactgttgga ntttgagagc ctggaagagt 600
gttatatggc aaagatactt gttgctgaag gtaccaggga tgttcccatc ggagcgatca 660
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cctcagcagc acctacccca caagcggccc cagcaccaac ccctgctgcc actgcttcgc 780
cacctacacc ttctgctcag gctcctggta gctcatatcc ccctcacatg caggtacttc 840
ttcctgccct ctctcccacc atgaccatgg gcacagttca gagatgggnn aaaaaagtgg 900
gtgagaagct aagtgaaggr gacttactgg cagagataga aactgacaaa gccactatag 960
gttttgaagt acaggaagaa ggttatctgg caaaaatcct ggtccctgaa ggcacaagag 1020
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ttgctgacta taggccaacc gaagtaacag atttaaaacc acaagygcca ccacctaccc 1140
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ctgttgtgcc tcccacaggt cctggaatgg caccagttcc tacaggtgtc ttcacagata 1440
tcccaatcag caacattcgt cgggttattg cacagcgatt aatgcaatca aagcaaacca 1500
tacctcatta ttacctttct atcratgtaa atatgggaga agtttttgttg gtacggaaag 1560
aacttaataa gatattagaa gggagaagca aaatttctgt caatgacttc atcataaaag 1620
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taagacaaaa tcatgttgtt gatgtcagtg ttgcggtcag tactcctgca ggactcatca 1740
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ttacgatctc caatttagga atgtttggaa ttaagaattt ctctgctatt attaacccac 1920
ctcaagcatg tattttggca attggtgctt cagaggataa actggtccct gcagataatg 1980
aaaaagggtt tgatgtggct agcatgatgt ctgttacact cagttgtgat caccgggtgg 2040
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tcactatgtt gttgtaacta actcaagaat ttctaaactc tcccaggtca cactgattca 2160
ttcttaacaa gatatttata tgttattaaa caggtggttc ttttttatttt aaccagttat 2220
ttttattatt gagtctgtcc agataagtta tttataatgg gcattactga atttttaaaa 2280
tgccgattac acccaaatat tgtgcacatt taataatcag acaccagatt tttagctctg 2340
tactcctaat taagggacat gtatgtggcc ttgcctagcc ctttggtgat aagtacttcc 2400
tctaggaaat gtacgatagg tagaattgtg gttccctaaa gacaagtaca taaaggtgac 2460
cctgatgaaa ccttgaagtt ctgaaattta actgcctaaa atgttctcct tagatgtgag 2520
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tcttcagctg attgtttatt tttctatgaa ttcctacaca tggttattcc cccctacttg 2760
agataatcta aatataaacc agctacttga tgtaactgar aatttgtgtg gatatttatt 2820
taaacaaatg tgtaattttg agtacagaat tcaacagtta cctccaaaaa agaaacattg 2880
```

236

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ttaatataat ttaacagaag ttgtgaaact aaaattttct aagattaact ggtagttcat 2940
tgtaaatgaa cataatgaac agaatttatg actccactgt ggaaaatgct atcaaataac 3000
taaggaatat atatggaata agtgtacata tgtaaaatat tgttactaga gttagatatg 3060
tgccaaagtc catttatccc aaatcctgtc tgaaaaggag gggtacattg gtaaacattt 3120
tggagtgctt aaaaatgcca aaaacaaaat ggtaatttct actttgataa agtaaaaaag 3180
ttaaatgtgt gtaaaaaagt gttctgtgtc cttctactcc agcatcgtct catgtaaaat 3240
aagaaagccc taaaatacta ttggagagaa aaaattaact aggttgctac tttatttgcc 3300
taaatacttt tttctatttt gttagatttt gcctttcttt tggaaggaag gaggcgatat 3360
tctgsattat aaaaatgaat tgggaacatt atcacaattc cagactttct attaatattt 3420
atgtgtttta ataaacgttt gaaattattt atgactactt aaaatgaatc tgaccagtgc 3480
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tcaatatgat ccaaatctgg ttcaaacatt caaaacttca aagataattc atctttcgct 3780
aatgcttgtg gttctgttgt tcccttgaaa aaaaataaaa acagttgcct tctaataaac 3840
attgttgagt taaaaatta                                             3859
```

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<210> 304
<211> 3378
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1350)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3361)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3365)
<223> n equals a,t,g, or c

<400> 304
tagttctaga tcgcgagcgg ccgacgagnc ggcgctgtgc ctgcagtgcg atatgaacga 60
ctgctatagc cgcctgcgga ggctggtgcc caccatcccg cccaacaaga aagtcagcaa 120
agtggagatc ctgcagcacg ttatcgacta catcctggac ctgcagctgg cgctggagac 180
gcacccggcc ctgctgaggc agccaccacc gcccgcgccg ccacaccacc cggccgggac 240
ctgtccagcc gcgccgccgc ggaccccgct cactgcgctc aacaccgacc cggccggcgc 300
ggtgaacaag cagggcgaca gcattctgtg ccgctgagcc gcgctgtcca ggtgtgcggt 360
cgcctgagcc cgagccagga gcactagaga gggagggggga agagcagaag ttagagaaaa 420
```

237

```
aaagccaccg gagaaaggaa aaaacatcgg ccaacctaga aacgttttca ttcgtcattc 480
caagagagag agaggaaaga aaaatacaac tttcattctt tctttgcacg ttcataaaca 540
ttctacatac gtattctctt ttgtctcttc atttataact gctgtgaatt gtacatttct 600
gtgttttttg gaggtgcagt taaactttta agcttaagtg tgacaggact gataaataga 660
agatcaagag tagatccgac tttagaagcc tactttgtga ccaaggagct caatttttgt 720
tttgaagctt tactaatcta ccagagcatt gtagatattt ttttttttaca tctattgttt 780
aaaatagatg attataacgg ggcagagaac tttctttttct ctgcaagaat gttacatatt 840
gtatagataa atgagtgaca tttcatacca tgtatatata gagatgttct ataagtgtga 900
gaaagtatat gctttaatag atactgtaat tataagatat ttttaattaa atatttttt 960
gtaaatatta tgtgtgtgtt ttttttaat ctatgggaat atttcttttg gaaaatcatt 1020
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tatacaagaa taaaagtatt atagacccaa gggacttctt atgaggtcaa attcagatat 2160
ttatatgaat atgaaatacc atggtcccta gtagtcagtt gaagtggcaa tgtctaaaca 2220
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tgttactcct taaagtttgt atttggggca tgaaaaacta ctgaaagaag aaaagtgcta 2760
cagatactac atttcaaaga gttggcattt tccctttggc cactcaagca gcatttgatg 2820
tatctaaaga aacaaagtca ttgtttattt tttaaaaaat tatatgcagt tgtacaagat 2880
actacattcc attgaaatgt tggctatgtc ctaaccaggc aaccagataa caaaaacatt 2940
ttgagtcttt tatctaggta gttctaatta ttcagctact tagtttaaca aaggaaaata 3000
tcctgacttc tctcatttca tttgtagact tttcattgta taggcacaac caaagagtca 3060
gactggttta aaactccaga aggaaaaaaa gtatcccaca cagtggatgt tgtttctaag 3120
aatgctacaa aatcctgaca tctcagacat ctcaatgtta aaggaagaaa aaaaatacct 3180
tttcatttca aagaactaat atactttgat attgtgtaaa ccttactcaa gtttattgtc 3240
aagctttaac tgccttttta gaactttta aaatttcgag cccacaaatc tattgtatta 3300
gttgccttct ataacaataa atcttcactg agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 3360
ncccnggggg gggggccc                                             3378
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238

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<210> 305
<211> 1014
<212> DNA
<213> Homo sapiens

<400> 305
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ggaggagtcg gcgggcggca ccaagggcag cagcaagaag gcgtcggcgg cgcagctgcg 120
gatccagaag gacataaacg agctgaacct gcccaagacg tgtgatatca gcttctcaga 180
tccagacgac ctcctcaact tcaagctggt catctgtcct gatgagggct ctacaagag 240
tgggaagttt gtgttcagtt ttaaggtggg ccagggttac ccgcatgatc cccccaaggt 300
gaagtgtgag acaatggtct atcaccccaa cattgacctc gagggcaacg tctgcctcaa 360
catcctcaga gaggactgga agccagtcct tacgataaac tccataattt atggcctgca 420
gtatctcttc ttggagccca accccgagga cccactgaac aaggaggccg cagaggtcct 480
gcagaacaac cggcggctgt ttgagcagaa cgtgcagcgc tccatgcggg gtggctacat 540
cggctccacc tactttgagc gctgcctgaa atagggttgg cgcatacca cccccgccac 600
ggccacaagc cctggcatcc cctgcaaata tttattgggg gccatgggta ggggtttggg 660
gggcggccgg tgggggaatc ccctgccttg gccttgcctc cccttcctgc cacgtgcccc 720
tagttatttt tttttttta acaccatgtg attaaggtcg gcgctgcctc ccccgaccca 780
ctcagcgatg ggaaatgaat tggcttgtct agcccccctg ctgggtgctt gttcagcccc 840
cactctgggc tgtggagtgg gtgggcaacg ggcctgggta gctgggccca ggcaacccac 900
ccctccacct ctggaggtcc caccaggcta ttaaagggga atgttactgc aaaaaaaaaa 960
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa      1014

<210> 306
<211> 2127
<212> DNA
<213> Homo sapiens

<400> 306
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cgagtgtcca gacacttccc tctgtgacca tgaaactctg ggtgtctgca ttgctgatgg 120
cctggtttgg tgtcctgagc tgtgtgcagg ccgaattctt cacctctatt gggcacatga 180
ctgacctgat ttatgcagag aaagagctgg tgcagtctct gaaagagtac atccttgtgg 240
aggaagccaa gctttccaag attaagagct gggccaacaa aatggaagcc ttgactagca 300
agtcagctgc tgatgctgag ggctacctgg ctcaccctgt gaatgcctac aaactggtga 360
agcggctaaa cacagactgg cctgcgctgg aggaccttgt cctgcaggac tcagctgcag 420
gttttatcgc caacctctct gtgcagcggc agttcttccc cactgatgag gacgagatag 480
gagctgccaa agccctgatg agacttcagg acacatacag gctggaccca ggcacaattt 540
ccagagggga acttccagga accaagtacc aggcaatgct gagtgtggat gactgctttg 600
ggatgggccg ctcggcctac aatgaagggg actattatca tacggtgttg tggatggagc 660
aggtgctaaa gcagcttgat gccggggagg aggccaccac aaccaagtca caggtgctgg 720
actacctcag ctatgctgtc ttscagttgg gtgatctgca ccgtgccctg gagctcaccc 780
gccgcctgct ctcccttgac ccaagccacg aacgagctgg agggaatctg cggtactttg 840
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caaccccaga aggcatctat gagaggcctg tggactacct gcctgagagg gatgtttacg 960
agagcctctg tcgtggggag ggtgtcaaac tgacaccccg tagacagaag aggctttct 1020
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acgagtggga cagcccgcac atcgtcaggt actacgatgt catgtctgat gaggaaatcg 1140
agaggatcaa ggagatcgca aaacctaaac ttgcacgagc caccgttcgt gatcccaaga 1200
caggagtcct cactgtcgcc agctaccggg tttccaaaag ctcctggcta saggaagatg 1260
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239

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atgaccctgt tgtggcccga gtaaatcgtc ggatgcagca tatcacaggg ttaacagtar 1320
agactgcaka attgttacag gttgcaaatt atggagtggg aggacagtat gaaccgcact 1380
tcgacttctc taggaatgat gagcgagata ctttcaagca tttagggacg gggaatcgtg 1440
tggctacttt cttaaactac atgagtgatg tagaagctgg tggtgccacc gtcttccctg 1500
atctgggggc tgcaatttgg cctaagaagg gtacagctgt gttctggtac aacctcttgc 1560
ggagcgggcg aaggtgacta ccgaacaaga catgctgcct gccctgtgct tgtgggctgc 1620
aagtgggtct ccaataagtg gttccatgaa cgaggacagg agttcttgag accttgtgga 1680
tcaacagaag ttgactgaca tccttttctg tccttcccct tcctggtcct tcagcccatg 1740
tcaacgtgac agacaccttt gtatgttcct ttgtatgttc ctatcaggct gattttttgga 1800
gaaatgaatg tttgtctgga gcagagggag accatactag ggcgactcct gtgtgactga 1860
agtcccagcc cttccattca gcctgtgcca tccctggccc caaggctagg atcaaagtgg 1920
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gtgtgagatg tttcagtgaa ccaaagttct gataccttgt ttacatgttt gttttttatgg 2040
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aaaaaaaaaa aaaaaaaaag ggcggcc                                      2127
```

<210> 307
<211> 666
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (588)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (664)
<223> n equals a,t,g, or c

<400> 307
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gtgccctgac tgcctgacgg ccgcgcaggg ccttgcagga ccgctgggga ggatgttgtt 60
aacgtaaaga gccaggctga tgaggaaggt tcatgagtcc tttgggtata agcgggagtt 120
ggggcggccg gaaggcagat gactctgaga agggcaagca ctttaacctt ttaagcccaa 180
ccagatgagt tgcctgcagt tttggaggcc ttcagagcat ttcactagac ctctgtctgt 240
gtcggtccag tgtctttagc caagctttga ttaaagatga cttccttgtt tgctcaagaa 300
attcgccttt ctaaaagaca tgaagaaata gtatcacaaa gattaatgtt acttcaacaa 360
atggagaata aattgggtga tcaacacaca gaaaaggcat ctcaactcca aactgttgag 420
actgctttta aaaggaacct tagtctttta aaggatatag aagcagcaga aaagtcacta 480
cagaccagga ttcacccact tccacggcct gaggtggttt ctcttgagac tcgttactgg 540
gcatcataga agaatatatt cccaaatggg aacagtttct tttagggnga gcaccatatc 600
cttttgctgt tgaaaatcaa aatgaagcag aaaataccat tcaaaatgag gcacagcgat 660
aacntc                                                            666
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<210> 308
<211> 2171
<212> DNA
<213> Homo sapiens

<220>

240

<221> misc feature
<222> (1248)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2162)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2168)
<223> n equals a,t,g, or c

<400> 308
cctcggcggt acccggagct tcaggcccca ccggggcgcg gagagtccca ggcccggccg 60
ggaccgggac ggcgtccgag tgccaatggc tagctctagg tgtcccgctc cccgcgggtg 120
ccgctgcctc cccggagctt ctctcgcatg gctggggaca gtactgctac ttctcgccga 180
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gccactgctc cgggtctggg cggtgtgggcct gagccgctgg gccgtgctct ggctgggggc 300
ctgcggggtc ctcaggggcaa cggttggctc caagagcgaa aacgcaggtg cccaggggctg 360
gctggctgct ttgaagccat tagctgcggc actgggcttg gcctgccggg acttgccttg 420
tyccgagagc tgatctcatg gggagcccccc gggtccgcgg atagcamcag gctactgcac 480
tggggaagtc accctaccgc cttcgttgtc agttatgcag cggcactgcc cgcagcagcc 540
ctgtggcaca aactcgggag cctctgggtg cccggcggtc agggcggctc tggaaaccct 600
gtgcgtcggc ttctaggctg cctgggctcg gagacgcgcc gcctctcgct gttcctggtc 660
ctggtggtcc tctcctctct tggggagatg gccattccat tctttacggg ccgcctcact 720
gactggattc tacaagatgg ctcagccgat accttcactc gaaacttaac tctcatgtcc 780
attctcacca tagccagtgc agtgctggag ttcgtgggtg acgggatcta taacaacacc 840
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acggagtttt tccaacagaa ccagacaggt aacatcatgt ctcgggtaac agaggacacg 960
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aatctgtacc agcccaccgg gggacagctg ctgttggatg ggaagcccct tccccaatat 1800
gagcaccgct acctgcacag gcaggtggct gcagtgggac aagagccaca ggtatttgga 1860

241

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agaagtcttc aagaaaatat tgcctatggc ctgacccaga agccaactat ggaggaaatc 1920
acagctgctg cagtaaagtc tggggcccat agtttcatct ctggactccc tcagggctat 1980
gacacagagg tagacgaggc tgggagccag ctgtcagggg gtcagcgaca ggcagtggcg 2040
ttggcccgag cattgatccg gaaaccgtgt gtacttatcc tggatgatgc caccagtgcc 2100
ctggatgcaa acagccagtt acaggtggag cagctcctgt acgaaagccc tgagcggtac 2160
tnccgntnaa g                                                     2171
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<210> 309
<211> 6163
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6132)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6135)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6158)
<223> n equals a,t,g, or c

<400> 309
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aattcggcac gagcacagcc tgagcatact ctgtgcatta ggaagacctg agtgcatttc 60
ccaccattgt cctttccaca ttatgttgta gctggctggc tgtmaggcga ctacaagact 120
gagggtsttg tgccttatag atstttgtat cccccatggc tgacacatag taggtactca 180
gtaaatggtt ttataatgaa tcagtgaaca ttttgcttct atagaagtgt accttctttg 240
tttctatatt atgaaacctc tttattagaa tttgtgattg attctgacag tgtatagatt 300
taccttatat tgtctttatt ttccatgagc tactaagtca ttagagatac tctgaagcat 360
agttagttta ggaaatcact tcatattgat tgtattagaa ttatcttgga attgaagata 420
tatccctaga gcaggggacc ccaaccccca ggccatgggc cacacagcag gaagaggtga 480
gtggtgggcc attgaggagc ttcatctgta tttatggcta cttcccatca ctcgaattac 540
cacctgaact ccacctcttg tcagctcagt ggcagcatta gattctcata gragcacaaa 600
tcctattgtg aactctgcat gcaagggatc taggctatgc gctccttatg agaatctaat 660
gcctgatgac ctgaggtgka acagtttcat cctgaaacca cccttcaccc tgcagtctgt 720
ggaaaaattg tcttccacaa aactggtccc tggtgccaaa aatgktgggg accgctgctc 780
tagagagagg tcatgatatc ataccaacca aatggaaatr acaaatgttt tatgtcaagt 840
gttaattgca gaaat-aaatc tttttttttt tttttttggta gaaaacaaag aggcatactc 900
tgatttttat actctgtttt tgcaggtgct ctttctcttg aatggagatt tgatgagcaa 960
gtggttagga tgcagggaga gctactatgg gtgatatttt ccttgtttag gagctgtgag 1020
ttaaaattgt atcctttctg gtttatctaa ggaaagtcaa atcttgacag aaaacatttt 1080
tccttggaag gtcaactctc agacattgta ttttggtttc cctcagtcct cataacttcc 1140
ttcttgctga acatatttta ttctcttttc agagaaggaa aataaaaagg attctaaaag 1200
tttgatgcat tggaaaaatt tccttgaggc atttagcaac acatagaaaa tgggctttga 1260
ttctttcca aaacttttag ccatagggtc ttttatagac agggatagta aaatgaaaat 1320
tgagaaatat aagatgaaaa ggaatgrtaa aaatatcttt taggggggctt ttaattggtg 1380
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242

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atctgaaatc ttgggagaag ctgttctttt caggcctgag gtgctcttga ctgtcgcctg 1440
cgcactgtgt accccgagca acattctaag ggtgtgcttt cgccttggct aactcctttg 1500
acctcattct tcatatagta gtctaggaaa aagttgcagg taatttaaac tgtctagtgg 1560
tacatagtaa ctraatttct attcctatga gaaatgagaa ttatttattt gccatcaaca 1620
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agaacattat gtttgtatca tttctttcat aaaacctcaa gagcattttt aagccctttt 1740
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gaacacaatc caccattgtc atttaagtaa taagacagga aattgacctt gacgctttct 1860
tgttaaatag atttaacagg aacatctgca catctttttt ccttgtgcac tatttgttta 1920
attgcagtgg attaatacag caagagtgcc acattataac taggcaatta tccattcttc 1980
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243

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aaggggggcg cnctnaagat cccccaaggg gcccaacnta ccc            6163
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<210> 310
<211> 2086
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1763)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1769)
<223> n equals a,t,g, or c

<400> 310
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cgcctcccca cgccgtcaga gatcctcagc aacgcgggtc tcaggtttga ggtggtcccc 180
tccaagttta aagagaagct ggacaaagcc tccttcgcta ctccgtatgg gtacgccatg 240
gagaccgcca agcagaaggc cctggaggtg gccaaccggc tgtaccagaa agacctgcgg 300
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ccgcccggtc cccaagtacc ataggacagt cacataggag cgtgtagtcg tgactgaata 2040
aagaaagcaa aagccaaaaa aaaaaaaaaa aaaatttgg ggggggg     2086
```

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<210> 311
<211> 2163
<212> DNA
<213> Homo sapiens
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<400> 311
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tccagcccta cctggcgcgg cggcccaagc tgcagctgag cgtgtacacc acgacgaggt 180
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cgctgtatgc ctacatcttc ctccatcacg ctggggtcct gccgtggcac gacgggaagc 360
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agcagttcgg gttttcagag aaagatgctg atgaggtgaa aggaattttt gtagatacca 840
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245

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aaa                                                                  2163


<210> 312
<211> 1397
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1397)
<223> n equals a,t,g, or c

<400> 312
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ggtcctctca ggaaaggggg gcgttgggaa aagcaccatc tccacggagc tggccctggc 180
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246

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tcggttcccg ggccctgcag gggcaggccc aggcagcgtc agcgggagag cttctccccg 1020
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tggtctgcgt gctctgcagc tgtgagacgg gggcggcctg ggctctcttc ccatccatgt 1140
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aaaaaaaaaa aaaaaan                                                1397
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<210> 313
<211> 4106
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<400> 313
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cccaaaccac cacagattca ctattgtgat gtttgtraga tcagctgtgt ggaccacaga 480
cttataaaga acatttagaa ggacagaaac ataaaaaaaa agaagctgca ttgaaagcct 540
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gccatgatta tgtggaagag gtacgaaatg atgaaggaa agtaattcgg ttccattgta 1200
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247

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gcatgacatt cttgttttta atagactttt aaaatcataa ttttaggttt aacacgtaga 3480
tctttgtaca gttgactttt tgacatagca aggccaaaaa taactttctg aatatttttt 3540
tcttgtgtat aagtggaaag ggcatttttc acatataagt gggctaacca atattttcaa 3600
aagaacttca tcattgtaca actaacaaca gtaactagcc cttaattatg gtgacagttc 3660
cttattggtg tgtgtgagat tactctagca actattacag tataacacag atgatcttct 3720
ccacacaccc catcacccag ataatttaca gttctgttaa cagtgaggtt gataaagtat 3780
tactgataaa aaattatcta aggaaaaaaa cagaaaatta tttggtgtgg ccatcttacc 3840
tgcttatgtc tcctacacaa agctaaatat tctagcagtg atgtaatgaa aaaattacatc 3900
ttactgttga tatatgtatg ctctggtaca cagatgtcat tttgttgtca cagcactaca 3960
gtgaaataca caaaaaatga aattcatata atgacttaaa tgtattatat gttagaattg 4020
acaacataaa ctacttttgc tttgaaatga tgtatgcttc agtaaaatca tattcaaatt 4080
taaaaaaaaa aaaaaaaaa actcga                                       4106
```

<210> 314
<211> 532
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (497)
<223> n equals a,t,g, or c

<220>
<221> misc feature

248

```
<222> (498)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (502)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (524)
<223> n equals a,t,g, or c


<400> 314
gactggaccc gggagacatc acagcgctgg gctaggggcg cggcttgaac tcgcctaaag 60
agctgcgccc tctcacccgt gccgccccag ccgctgccgc ctgcaccgga cccggagccg 120
ccatgcccaa gtgtcccaag tgcaacaagg aggtgtactt cgccgagagg gtgacctctc 180
tgggcaagga ctggcatcgg ccctgcctga agtgcgagaa atgtgggaag acgctgacct 240
ctggggggcca cgctgagcac gaaggcaaac cctactgcaa ccacccctgc tacgcagcca 300
tgtttgggcc taaaggcttt gggcgggggcg gagccgagag ccacactttc aagtaaacca 360
ggtggtggag accccatcct tggctgcttg cagggccact gtccaggcaa atgccaggcc 420
ttgtccccag atgcccaggg ctcccttgtt gccctaatg ctctcagtaa acctgaacac 480
ttggaaaaaa aaaaaanngg gnggcgtttt aaagattcct cganggggcc aa        532


<210> 315
<211> 1938
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (1270)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (1455)
<223> n equals a,t,g, or c


<400> 315
gcggctttgg ctctgggcga ggcggcgggg ccggggcttc tcggacgagg cgggcttggc 60
gggcgcccgg cagctacagc tgcaggaggc ggccggcgac cccgacgcgc cgcccaagaa 120
gcggctgcgg gcagccgagg cggccgaggc ggcggcggcg gcggcggcgg ccggcagcgg 180
gaaactggag gagcggctct actcggtgct gtgctgcacc gtgtcctgga cctgcccaag 240
gcctccgtgt accagtgtac taatggtcac ttgatgtgcg ctggctgttt tatccaccta 300
ctagcagatg cccggctgaa ggaggagcag gccacgtgcc ccaattgtcg ttgtgagatc 360
agtaagagcc tctgctgccg gaacctggcc gtggagaaag ccgtgagcga gctgccttca 420
gagtgtggct tctgcctgcg ccagtttccc cgctccctcc tggagaggca ccagaaagag 480
gaatgccacg gacagggtaa cccagtgcaa gtacaaacgc atcggctgcc catggcacgg 540
ccccttccat gagctgacgg tgcacgaggc tgcgtgcgcc cacccgacca agacaggcag 600
tgagctgatg gagatcctgg atgggatgga ccagagccac cgcaaggaga tgcagctgta 660
```

```
caacagcatc ttcagcctgc tcagcttcga gaagattggc tacacagagg tccagttccg 720
gccgtaccgc acagacgact tcatcacgcg cctgtactat gagacgccca ggttcacagt 780
gctgaaccag acgtgggtcc tgaaggctcg agtcaacgac tcggagcgta accccaacct 840
gtcctgcaag cgtacgctct ccttccagct cctcctcaag agcaaggtca cggcaccgct 900
ggagtgctcc ttcctgctgc tcaagggccc ctacgacgac gtgaggatca gccccgtcat 960
ctaccacttt gtcttcacca acgagagcaa cgagacggac tacgtgccac tgcccatcat 1020
tgactccgtg gagtgcaaca agctgctggc tgccaagaac atcaacctgc ggctcttcct 1080
gttccagata cagaagtagg gcggggcctc aggatgtccg aggagcccac gggcggcatc 1140
ccagcaccgc tgccctgtcc acctggctgg cagctgcttc acaggactat ctgatcactt 1200
tagcaaagga ggagaacaaa cgaagccaac acagggcaag tctgcatgcg tgcgcgacgg 1260
ggccccccgcn tccggctcac ccccccgacc cctgcctccc ctccttccga gggccgccag 1320
aggctgggct gacccgaaga ggagacggtg caccaggcgc cccgaggcta agagacggtg 1380
gcagcaagga ggccgagagg cacagcgacc ctgccccagc ccttctgtgc agtcaggcgg 1440
cggtgctgct ccatnctgcg ggttccggcg gggcgcgggg gccttgctga catcagacgg 1500
gatatccgaa tatctgatag caattaaaag gcagccttgt ttcgtacttt ctgttttgtt 1560
cgaggggaag gcatggctgt gaatggacag cgtgggggct ttggtttggc ctggggtca 1620
gagcctgccc cgcccccatc tgtgtgcccg cacacgtccc ccgaggaaag actcagagac 1680
actgcctccc cctacgctct gtcatggggt cttgagactg aggcttgggc aggaagatcc 1740
aggtagggtc ggggctgccc tgccaaccgg ccgctcccag ggagacagga ctcagccacc 1800
agggctcagc aggcattttc ggaaagcagg gtgaaattgt ctcttcccag gaaaaagatt 1860
aaactccttg caggctcttg gataagttac acaaaaaaaa aaaaaaaag ggcgcccgct 1920
cgcgatctag aactagtc                                              1938
```

<210> 316
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (814)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (818)
<223> n equals a,t,g, or c

<400> 316
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gcggccgccc ggcgccccca gcagcccgag ccggggcgca cagccggggc gcagncgcgc 60
cccccgccgc gattgacatg atgtttccac aaagcaggca ttcgggctcc tcgcacctac 120
cccagcaact caaattcacc acctcggact cctgcgaccg catcaaagac gaatttcagc 180
tactgcaagc tcagtaccac agcctcaagc tcgaatgtga caagttggcc agtgagaagt 240
cagagatgca gcgtcactat gtgatgtact acgagatgtc ctacggcttg aacatcgaga 300
tgcacaaaca ggctgagatc gtcaaaaggc tgaacgggat ttgtgcccag gtcctgccct 360
acctctccca agagcaccag cagcaggtct ggggagccat tgagagggcc aagcaggtca 420
```

```
ccgctcccga gctgaactct atcatccgac agcagctcca agcccaccag ctgtcccagc 480
tgcaggccct ggccctgccc ttgaccccac tacccgtggg gctgcagccg ccttcgctgc 540
cggcggtcag cgcaggcacc ggcctcctct cgctgtccgc gctgggttcc caggcccacc 600
tctccaagga agacaagaac gggcacgatg gtgacaccca ccaggaggat gatggcgaga 660
agtcggatta gcaggggcc gggacaggga ggttgggarg ggggacarag gggagacaga 720
ggcacggaga gaaaggaatg tttagcacaa gacacagcgg agctcgggat tggctaaayt 780
ccatagtatt atgktggccc ggggggggc ccanccan                          818
```

<210> 317
<211> 837
<212> DNA
<213> Homo sapiens

<400> 317
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gggcacgagc gacatggagc tgttcctcgc gggccgccgg gtgctggtca ccggggcagg 60
caaaggtata gggcgcggca cggtccagcc gctgcacgcg acgggcgcgc gggtggtggc 120
tgtgagccgg actcaggcgg atcttgacag ccttgtccgc gagtgcccgg ggatagaacc 180
cgtgtgcgtg gacctgggtg actgggaggc caccgagcgg gcgctgggca gcgtgggccc 240
cgtggacctg ctggtgaaca acgccgctgt cgccctgctg cagcccttcc tggaggtcac 300
caaggaggcc tttgacagat cctttgaggt gaacctgcgt gcggtcatcc aggtgtcrca 360
gattgtggcc aggggcttaa tagcccgggg agtcccaggg gccatcgtga atgtctccag 420
ccagtgctcc cagcgggcag taactaacca tagcgtctac tgctccacca agggtgccct 480
ggacatgctg accaaggtga tggccctaga gctcgggccc cacaagatcc gagtgaatgc 540
agtaaacccc acagtggtga tgacgtccat gggccaggcc acctggagtg acccccacaa 600
ggccaagact atgctgaacc gaatcccact tggcaagttt gctgaggtag agcacgtggt 660
gaacgccatc ctctttctgc tgagtgaccg aagtggcatg accacgggtt ccactttgcc 720
ggtggaaggg ggcttctggg cctgctgagc tccctccaca cacctcaagc cccatgccgt 780
gctcatccta cccccaatcc ctccaataaa cctgattctg ctgcccaaaa aaaacga    837
```

<210> 318
<211> 1448
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (878)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1198)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1395)
<223> n equals a,t,g, or c

<220>
<221> misc feature

251

<222> (1397)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1445)
<223> n equals a,t,g, or c

<400> 318
gggtctggag agcaggactg ggtcaacagg cccaagaccg tgcgcgacac gctgctggcg 60
ctgcaccagc acggccactc ggggccttcg agagcaagtt taagaaggag ccggccytga 120
ctgcaggcag gttgttgggt ttcgaggcca acggggccaa cgggtctaaa gcaggtaggg 180
gcggctgtga agtgaggggg tctaggggag aaaaggggac ggagagcaga ggaagggtgg 240
ttctttggat tcaccatttt accccagccc agaaacaaca aacacccac ttcctgatct 300
cctgaggcgg aaccagtgct tggtggcaac gtgttcatgt ctgaagcagc ataacaaaga 360
atgagtcaga ctgggctgat acgctctgaa cacggggttt tcctttccca gcacattctt 420
ggatgggagc atgagggcac cagtcacctt twaacctatt gggggacatt agcagtcaca 480
tgttgagtgc aaacgaggta cttttgtgca tgtktacaaa caggcagtta caagcgtgtc 540
attttcagtg gctccatttt aaatcagtct gctgcctcag aatcccgtac gcctgaaggt 600
tttaagttgc atgtgcacct gaaactcgta tatgagtatt ttctgtctgt gcttttagag 660
aggaggaatt ctgtaacgac ttttgtttcg ggttaggaag agaatgatct ctttcagtgc 720
accgccactt atgttacctt tttcctttta tttctttgtg tttccagttg caagaacagc 780
aaggaaaagg aagccctctc cagaaccaga aggtgaagtc gggcccccta agatcaacgg 840
agaggcccag ccgtggstgt ccacatccac agaggggntc aagatcccca tgactcctac 900
atcctctttt gtgtctccgc caccacccac tgcctcacct cattccaacc ggaccacacc 960
gcctgaagcg gcccagaatg gccagtcccc catggcagcc ctgatcttag tagcagacaa 1020
tgcaggggggc agtcatgcct caaaagatgc caaccaggtt cactccacta ccaggaggaa 1080
tagcaacagt ccgccctctc cgtcctctat gaaccaaaga aggctgggcc ccagagaggt 1140
gggggggccag ggagcaggca acacaggagg actggagcca gtgcaccctg ccagcctncc 1200
ggacttctct ctggcaacca gtgccccgct gtgctgcacc ctctgccacg agcggctgga 1260
ggacaaccat tttgtgcagt gccgtccgtc ctttgacaag ttctcttcct tgctcagaca 1320
aagataaaca gagggagtag tgagaggctt ttccagtggg gaaaatgcct ctgtgggtca 1380
atgtccctgg gcttntnaag gggaattcaa catcttcttg ggtgtaagtg aaaaaaaaaa 1440
aaacntgg   1448

<210> 319
<211> 1493
<212> DNA
<213> Homo sapiens

<400> 319
tcgacccacg cgtccggaag taatgatgac aaaatactct aacctttcct tggagagtca 60
taacttctcg ctgactgctt cacctcttac aagtctgccc atcccggaag taatgatgac 120
aaaatactcc aaccttttct tggaaagtca taacatctca ctgactgaac attccagtgt 180
gccagtggaa aaaaatatca ctttagaacg accttctgct gtagaactca catgtcagtt 240
cacaacttct ggggatgtga attcagtaaa tgtgacttgg aaaaaagggg atgaacaact 300
taagaattac catgtcagtg ccacagaagg catcctgtat acccagtaca agttttccat 360
cattaatagc gaacaactgg gaagctattc ttgtttcttt gaagaggaaa aggaacgaag 420
gggcacattt aatttcggag tccctgaagt tcagagaaaa aacaaaccat tgatcactta 480
tgtgggggat tccgttgtct tggtgtgtaa atgccgacac tgtgctcctt taaattggac 540
ctggtacagt ggtaatagga gtgtacaggt tcctcttgat gttcacatga atgaaaagta 600

252

```
tgcgatcaat ggaacaaacg cgaatgaaac aaggcttaag ataatgcagc tttcagaaga 660
cgataaagga tcttattggt gccatgcaat gttccagttg ggcgagagcc aagaaagtgt 720
tgaactggtt gtgataagtt atttggtgcc cctcaaacca tttcttggaa tagttgttga 780
agttattctt ttagtggcta ttattctgtt ttgtgaaatg cacacccaaa agaaaaagat 840
gcacatggat gatgggaaag aatttgaaca agttgaacag ttgaaatcag acgatagcaa 900
cggcatagaa aataatgccc ccaggcacag aaaaaatgaa gctatgagcc agtgaaagca 960
aaacatcgtg tcaagagtaa tgggaagatg tatagtttct acttcagctt tgtttatgtt 1020
tcctgtgaag aacatctgag tttttatttt tacaaggatg aaaagtttat gtgatatgct 1080
cagcagtagt tttgcaataa tacctgctat ctcagatcca aagatatatt ttccttctgt 1140
gattatttta cattaaagca aggtaaatca tattaaatat gttctatgag ctataaccca 1200
ggataactaa tttcatcttg gtcatcaagg gatgcacaga agagatacca gcaaaaccag 1260
ttagtagtac atgaactaat gtcattcaag acctgcgtat aaccaaagaa ttcattaaag 1320
agaaaacttt tttgccattt gccttgkttt tttttctaat tatgcttact atgtgtagaa 1380
atatttgtaa taattttcat gtaatgktca ccctctgtca tattggataa aaacatcttt 1440
attaagaaat gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagggcggc cgc      1493
```

<210> 320
<211> 609
<212> DNA
<213> Homo sapiens

<400> 320
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ggcacgagtg gcttctgacc ctttcttccg ccactaccgc cagctcaatg agaagctagt 60
gcagctcatc gaagactata gccttgtctc ctttatccct ctcaacatcc aggacaagga 120
gagcatccag cgagtcctgc aggctgtgga taaagccaat ggatactgtt tcggagccca 180
agagcagcga acttggaagc catgatgtct gccgcaatgg gagccgactt ccatttctct 240
tccacactgg gcatccagga gaagtacctg gcaccctcga accagtcagt ggagcaggaa 300
gccatgcagc tgtagcaaca aggtggaccc tggagagcag gatgcataat ccagcactgg 360
ggaaagtgga ggctcctgat gcaggctgca gacccaagag caagtcctcc cagccagagc 420
tggcgggctg gcaaggggat attcagctct gcaaaggact tctggccaaa aagccagaca 480
tggtgccaag cagaacaccc cccatactgt cagtggtgtc cgtgagctct ggccctgcca 540
ccagaaagtc gagcactggt cctagtcagg ctgtgatgaa atgtgctaca atacaagagt 600
ttattttct                                                      609
```

<210> 321
<211> 502
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (458)
<223> n equals a,t,g, or c

<400> 321
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tagtggatcc cccgggctgc aggaattcgg cacgagcaga gcttcgctct tgctgctccc 60
ctgaggtgaa ctgaagccag cagccccgca tcatgtcaaa gctcggccgg gccgcccggg 120
gcctcaggaa gcccgaggtc ggcggtgtra tccgggcgat cgtgcgggca ggcctggcca 180
tgcccgggcc cccactaggc ccagtgctgg gtcagagagg cgtttccatc aaccagtttt 240
gcaaggagtt caatgagagg acaaaggaca tcaaggaagg cattcctctg cctaccaaga 300
ttttagtgaa gcctgacagg acatttgaaa ttaagattgg acagcccact gtttcctact 360
```

253

```
tcctgaaggc agcagctggg attgaaaagg gggcccggca aacagggaaa gaggtggcag 420
gcctggtgac cttgaagcat gtgtatgaga ttgcccgnat caaagctcag gatgaggcat 480
ttgcctgcag gatgtacccc tg                                          502


<210> 322
<211> 2630
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1952)
<223> n equals a,t,g, or c

<400> 322
gggcatccag agtacgggtc gagcccgggc catggagccc ccctggggag gcggcaccag 60
ggagcctggg cgcccggggc tccgccgcga ccccatcggg tagaccacag aagctccggg 120
acccttccgg cacctctgga cagcccagga tgctgttggc caccctcctc ctcctcctcc 180
ttggaggcgc tctggcccat ccagaccgga ttatttttcc aaatcatgct tgtgaggacc 240
ccccagcagt gctcttagaa gtgcagggca ccttacagag gcccctggtc cgggacagcc 300
gcacctcccc tgccaactgc acctggctca tcctgggcag caaggaacag actgtcacca 360
tcaggttcca gaagctacac ctggcctgtg gctcagagcg cttaacccta cgctcccctc 420
tccagccact gatctccctg tgtgaggcac ctcccagccc tctgcagctg cccggggggca 480
acgtcaccat cacttacagc tatgctgggg ccagagcacc catgggccag ggcttcctgc 540
tctcctacag ccaagattgg ctgatgtgcc tgcaggaaga gtttcagtgc ctgaaccacc 600
gctgtgtatc tgctgtccag cgctgtgatg gggttgatgc ctgtggcgat ggctctgatg 660
aagcaggttg cagctcagac cccttccctg gcctgacccc aagacccgtc ccctccctgc 720
cttgcaatgt caccttggag gacttctatg gggtcttctc ctctcctgga tatacacacc 780
tagcctcagt ctcccamccc cagtcctgcc attggtgctg gaccccatga tggccggcgg 840
tggccgtgcg cttcacagcc ctggamttgg gctttggaga tgcagtgcat gtgtatgacg 900
gccctgggcc ccctgagagc tcccgactac tgcgtagtct cacccacttc agcaatggca 960
aggctgtcac tgtggagaca ctgtctggcc aggctgttgt gtcctaccac acagttgctt 1020
ggagcaatgg tcgtggcttc aatgccacct accatgtgcg gggctattgc ttgccttggg 1080
acagaccctg tggcttaggc tctggcctgg gagctggcga aggcctaggt gagcgctgct 1140
acagtgaggc acagcgctgt gacggctcat gggactgtgc tgacggcaca gatgaggagg 1200
actgcccagg ctgcccacct ggacacttcc cctgtggggc tgctggcacc tctggtgcca 1260
cagcctgcta cctgcctgct gaccgctgca actaccagac tttctgtgct gatggagcag 1320
atgagagacg ctgtcggcat tgccagcctg gcaatttccg atgccgggac gagaagtgcg 1380
tgtatgagac gtgggtgtgc gatgggcagc cagactgtgc ggacggcagt gatgagtggg 1440
actgctccta tgttctgccc cgcaaggtca ttacagctgc agtcattggc agcctagtgt 1500
gcggcctgct cctggtcatc gccctgggct gcacctgcaa gctctatgcc attcgcaccc 1560
aggagtacag catctttgcc cccctctccc ggatggaggc tgagattgtg cagcagcagg 1620
cacccccttc ctacgggcag ctcattgccc agggtgccat cccacctgta gaagactttc 1680
ctacagagaa tcctaatgat aactcagtgc tgggcaacct gcgttctctg ctacagatct 1740
tacgccagga tatgactcca ggaggtggcc caggtgcccg ccgtcgtcag cggggccgct 1800
tgatgcgacg cctggtacgc cgtctccgcc gctgggggctt gctccctcga accaacaccc 1860
cggctcgggc ctctgaggcc agatcccagg tcacaccttc tgctgctccc cttgaggccc 1920
tagatggtgg cacaggtcca gcccgtgagg gngggcagt gggtgggcaa gatggggagc 1980
aggcaccccc actgcccatc aaggctcccc tcccatctgc tagcacgtct ccagcccccca 2040
ctactgtccc tgaagcccca gggccactgc cctcactgcc cctagagcca tcactattgt 2100
ctggagtggt gcaggccctg cgaggccgcc tgttgcccag cctggggccc ccaggaccaa 2160
```

254

```
cccggagccc ccctggaccc cacacagcag tcctggccct ggaagatgag gacgatgtgc 2220
tactggtgcc actggctgag ccgggggtgt gggtagctga ggcagaggat gagccactgc 2280
ttacctgagg ggacctgggg gctctactga ggcctctccc ctgggggctc tactcatagt 2340
ggcacaacct tttagaggtg ggtcagcctc ccctccacca cttccttccc tgtccctgga 2400
tttcagggac ttggtgggcc tcccgttgac cctatgtagc tgctataaag ttaagtgtcc 2460
ctcaggcagg gagagggctc acagagtctc ctctgtacgt ggccatggcc agacaccca 2520
gtcccttcac caccacctgc tccccacgcc accaccattt gggtggctgt ttttaaaaag 2580
taaagttctt agaggatmaw aaaaaaaaaa aaaaaaaaa aaaaaaaagg           2630
```

<210> 323
<211> 1874
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1735)
<223> n equals a,t,g, or c

<400> 323
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tcgacccacg cgtccggccg gggcgccctc cggaagcttt tccaactttc cagaagtttc 60
tcgggangggg cgggaggagg ggaacgccat atatagacct ggagagccgg gagcgcggag 120
agtggaatcg gtccgcggct cgagtgggtc tctagtccgg cgccagccgc ccggcccagc 180
cctcacaggt ccttcgtggt gcataccatc cgcctcccag ccatgcgctt cctcctgctt 240
accagcactt gctgcctcct ggccatggcc ctggctgccg aggtgaagaa gccagcggcc 300
ccaggcacag cagagaagct garccccaaa gcggccacgc tggcagagcg cagtgctggc 360
ctggccttca gcctgtacca ggccatggcc aaggaccagg cggtggagaa catcctgctg 420
tcgcctgtgg tggtggcctc atccctgggg cttgtgtcgc tggggggcaa ggccaccaca 480
gcgtcccagg ccaaggcggt gctgagtgca gagcagytgc gtgatgagga ggtgcacgcg 540
ggsctkggcg agytgttgcg agctttcagc aacagcacgg cgcgcaacgt gacctgaagc 600
tgggcagccg cctgtatggg cccagctcgg tgarcttcgc ggaggacttt gtgcgcagca 660
gcaagcagca ctacaactgc gagcactcca agatcaactt ccgcgacaag cgcagcgccc 720
tgcagtccat caatgagtgg gccgcacaga ccaccgatgg caagctgcct gaggtcacca 780
aggacgtgga gcggacggat ggcgcgctgc tggtcaacgc catgttcttc aagccgcact 840
gggacgagaa gttccaccac aagatggtgg acaaccgagg cttcatggtg accgctcgt 900
ataccgttgg ggttacgatg atgcaccgca caggactcta caactactac gacgacgaga 960
aggagaagct gcagatggtg gagatgcccc tggcccacaa gctgtccagc ctcctcatcc 1020
tcatgccgca ccacgtggag ccctggagc gcctggagaa gcttctgacc aaggagcagc 1080
tgaagatctg gatggggaag atgcagaaga aagccgtcgc catctccttg cccaaggggg 1140
tggtagaggt gacccacgac ctgcagaaac acctggctgg actgggtctg actgaggcca 1200
tcgacaagaa caaggcagac ctgtcacgca tgtcaggcaa gaaggacctg tacctggcca 1260
gcgtgttcca cgctaccgcc ttcgagtggg acacagaggg caaccccttt gaccaggaca 1320
tctacgggcg tgaggagctg cgcagtccca agytcttcta cgctgaccac cccttcattt 1380
tcctggttcg agacacccag accggctccc tgctgttcat tgggcgcctg gtccggccca 1440
agggtgacaa gatgcgagat gagctgtagg gccccaggga tggcaggagg cagcccaagg 1500
ctcctgagac acatgggtgc tatgggggt agctgaggta ccgaccttgg atgtgccatg 1560
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255

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gggtgggggt gggaaaacag agcaggcttc ctggatgtct gagcagatct tcccaggcag 1620
aattgactct gtctggatgt gggcccccag ataccgtgat gctgagcccg gacacsccac 1680
attctgrggr ccctgggggc agttggcgtg tcttgccttc agcatcctgg gattnaagcc 1740
tgccttcaat cagtgttcat atttatagcc aagtgctttc tcatctgtga gacagaatcg 1800
agctargggg cttcagccca gccctgtgga atggggaccg tcttttcctt accctaccat 1860
cacctcagcc ctaa                                                     1874


<210> 324
<211> 2325
<212> DNA
<213> Homo sapiens

<400> 324
aagaaatgca gatgagtgta aaacatctgt tctcaattat gttgatctgt gtgcgcagta 60
ctggagcatt tacccattca tgttgagcct caaatgcttg ttttctgggg tccacaaaag 120
acagtttat acattttgag ttgttcataa agtttgtctt gtgatagtcc tggcacttaa 180
agacaaattt ttctggtagt aaaagttcag atttattact atgtcatgaa acacagtaca 240
ttcaaatcaa acggcagttt tctttctaag taaatgattt ccagtcatct aaaaggtggg 300
caagatgaga taaagacatt ttgatacagt aattgttttg gttgggtttt catgtcagtt 360
tatgtttgac taaagctctc ttcatatgca ggtttataaa tttgttaggt ctgttgtccc 420
atgattaaac atgsagtgcc tcctctctga tttaatattc tgcaggtcat tgtaacctgc 480
taggcaaagt cacaacattg cattaaagag gtgatagctt tgctaatatc actgttttaa 540
aggacgtaca gttaaaggaa tattaagtgg gagaaagcct acaaggcttt tagaatatta 600
tcagtatctt catttctggt attcagatgt tatgtgataa aacacatttt ttttggcttt 660
cccagataca ctatatattt gttcaagggt aaatctataa aatgtatata ctttattttg 720
tggttttgct atttataaat ttaatgtttt aactgttgct catttatggt ttgttttggg 780
tggtggtgtt catctgtata tcaccatgtt aatttgtaat ggaagtgcac ttcgtagtgt 840
atattgttac tgacattaaa atactttata gcattgtctc tgagcaaaag ctagtattta 900
attgtacaaa tgaataagca agttacatgt tattgtttgc tcttgacagg gtaggcctct 960
taaaagaaaa aaaacaactt gttttttctt tatgaatccc ctatgccaaa cacatacctt 1020
ccatgcatga catgagatct gcaaactgga ttttagccac cgtatttatt tagtcaaaaa 1080
aattgtccat tgtagcagac ccgaaaacct ttttgctgtg acatgaaacc atgttattct 1140
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tttatctgct atgactgaat ccttaggaaa tgtaagctat aaccctttga ttttcaagaa 1260
ctaccgaata agtgtatgaa gaggtggttt tttaaaactt caagttggaa tttttatgag 1320
gtcactgtgt aatttgaaga attgtgtgag attgtcatga tataaattcc ttttaaggac 1380
tgataaatag aatgaaaagt ttccaggtag tttaaaactc cacaggtcag tttccttttc 1440
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tgagcttcct gtccggtgtt agaaagtaac tagttaaaag ttcattttag aatgtatggt 1560
ttttgggggat gaactaagaa ttagttatta gttccaaagg actgagaacc aattttaata 1620
ttttcacatt tataggaaag aaattcatat gtccctgaaa cttctaggac aaaaccaaac 1680
aagtaaggag ggaactgttg caaagccatt tcatcgagaa ggggacagaa ggagaaatac 1740
acacatgtat acacaaacag aatggttgag aaaacgtttt aataaaatgt gagggttgta 1800
tgtgtgcgtg tatatattta cacttaacct ctaaaattct cttctacagt atctctgtta 1860
tgaatatgat ggaaaagcaa cattttggtg gtgagactat tgttaaaata aatttgagaa 1920
agacgaaaat tttgtgagtc ttgataatta caagtcaaca gctatcgaaa gttagcacag 1980
cttgtctgtg gtgctgtttt tttccccact gcagtggact tatgctgttt tcatgtttag 2040
aaacaaaaag gtttcatgtg attcatgtgt aagatgcaca gtatttgaca tcctgattat 2100
gtaatcccta ttccatctat ccagtcttac acttatggtt ggcctcaaat ctattgcatt 2160
tatgataatg tattatatct agttgagttt aatatttttt tattagcctg taaataaaga 2220
tggcatcttc tacattaaaa tgatattgat ctcatttttt taaataaaca ttttgtttcc 2280
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ttgacgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                 2325


<210> 325
<211> 785
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<400> 325
ggcctncggc aaagaagcat agccacgggg ccamagccag gtgtgtcctt gcagttggaa 60
cccaggagtt ccggaagcca aagccccccc acgagggtcc cgcgaagacc tggtggcgga 120
ggagagcccg gagctgctga accctgagcc caggagactg agcccagagt tgaggctact 180
gccctatatg atcactctgg gcgacgccgt gcacaacttc gccgacgggc tggccgtggg 240
cgccgccttc gcgtcctcct ggaagaccgg gctggccacc tcgctggccg tgttctgcca 300
cgagttgcca cacgagctgg gggacttcgc cgccttgctg cacgcggggc tgtccgtgcg 360
ccaagcactg ctgctgaacc tggcctccgc gctcacggcc ttcgctggtc tctacgtggc 420
actcgcggtt ggagtcagcg aggagagcga ggcctggatc ctggcagtgg ccaccggcct 480
gttcctctac gtagcactct gcgacatgct cccggcgatg ttgaaagtac gggacccgcg 540
gccctggctc ctcttcctgc tgcacaacgt gggcctgctg ggcggctgga ccgtcctgct 600
gctgctgtcc ctgtacgagg atgacatcac cttctgatac cctgccctag tcccccacct 660
ttgacttaag atcccacacc tcacaaacct acagcccaga aaccagaagc ccctatagag 720
gccccagtcc caactccagt aaagacactc ttgtccttgg aaaaaaaaaa aaaaaaaaaa 780
aaaaa                                                            785


<210> 326
<211> 244
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c

<400> 326
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gcgtccgacg acagaagggt acggctgcga gaagacgaca gaagggtacg gctgcgagaa 120
gacgacagaa gggtacggct gcgagaagac kacagaaggg tacggctgcg agaagackac 180
agaagggtac ggctgcgaga agacgacaga aggtacggct gcgagaagac gacagagggt 240
acgn                                                             244


<210> 327
<211> 2454
<212> DNA
<213> Homo sapiens

<400> 327
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257

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gctgcggcgg ggtctggggc gcagagcagc ggcgggagga ggcggacacg tggcaacagc 60
ggtacagccc gggcggcggc acaacagcgg cggcggcatc ggcccgagcg ccggccgccc 120
tcccaccctc ccgccccgcg gcagccctag ctccctccac ttggctcccc tggtcccgct 180
cgctcggccg ggagctgctc tgtgctttc tctctgattc tccagcgaca ggacccggcg 240
ccggcactga gcaccgccac catggggaag ggggttggac gtgataagta tgagcctgca 300
gctgtttcag aacaaggtga taaaaagggc aaaaagggca aaaagacag ggacatggat 360
gaactgaaga aagaagtttc tatggatgat cataaactta gccttgatga acttcatcgt 420
aaatatggaa cagacttgag ccggggatta acatctgctc gtgcagctga gatcctggcg 480
cgagatggtc ccaacgccct cactcccct cccactactc ctgaatggat caagttttgt 540
cggcagctct ttgggggggtt ctcaatgtta ctgtggattg gagcgattct ttgtttcttg 600
gcttatagca tccaagctgc tacagaagag gaacctcaaa acgataatct gtacctgggt 660
gtggtgctat cagccgttgt aatcataact ggttgcttct cctactatca agaagctaaa 720
agttcaaaga tcatggaatc cttcaaaaac atggtccctc agcaagccct tgtgattcga 780
aatggtgaga aaatgagcat aaatgcggag gaagttgtgg ttggggatct ggtggaagta 840
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gataactcct cgctcactgg tgaatcagaa ccccagacta ggtctccaga tttcacaaat 960
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gcttctgggc tggaaggagg ccagaccccc attgctgcag aaattgaaca ttttatccac 1140
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gagtacacct ggcttgaggc tgtcatcttc ctcatcggta tcatcgtagc caatgtgccg 1260
gaaggtttgc tggccactgt cacggtctgt ctgacactta ctgccaaacg catggcaagg 1320
aaaaactgct tagtgaagaa cttagaagct gtggagacct tggggtccac gtccaccatc 1380
tgctctgata aaactggaac tctgactcag aaccggatga cagtggccca catgtggttt 1440
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caggctaacc aggaaaacct acctattctt aagcgggcag ttgcaggaga tgcctctgag 1620
tcagcactct taaagtgcat agagctgtgc tgtggttccg tgaaggagat gagagaaaga 1680
tacgccaaaa tcgtcgagat acccttcaac tccaccaaca agtaccagtt gtctattcat 1740
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gacgatgtga atttccctat cgataatctg tgctttgttg ggctcatctc catgattgac 2040
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atcatggtca caggagacca tccaatcaca gctaaagcta ttgccaaagg tgtgggcatc 2160
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caggtgaacc ccagggatgc caaggcctgc gtagtacacg gcagtgatct aaaggacatg 2280
acctccgagc agctggatga catttttgaag taccacactg agatagtgtt tgccaagacc 2340
tcccctcagc agaagctcat cattgtggaa aggctgccaa agacagggtg ctatcgtggg 2400
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<210> 328
<211> 505
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
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<222> (182)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (246)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (302)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

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<222> (335)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (339)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
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<222> (367)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (419)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c

<220>
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<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c

<220>
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<222> (436)
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<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (452)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (454)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (459)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (467)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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261

<220>
<221> misc feature

<222> (474)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (475)
<223> n equals a,t,g, or c

<220>
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<222> (477)
<223> n equals a,t,g, or c

<220>
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<222> (479)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (483)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (488)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (490)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c

<400> 328
aattcggcan agggnagtgc gaagtagtgg gtgacttttg ttctctttct ggcagaactt 60
tgcctacaca ttcctactac ccctgggaat tctaactcag atgtgggtag cagcttcctc 120

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aaagagaaac ttttcccag ctgggtgctg tggctcacac ctgtgaatcc cagccctttg 180
gnaggctgna gtgggcagat cgcttgagcc caggagtttg agatcagcct gggcaacatg 240
gtgaantcca tctctgtgaa aaatacaaaa attagccagg tgtggtggtg cgcgcctgtn 300
antcccagct actagggagg ctgaaggtgg gnggnttgnt tnagcccagg aggttgaggc 360
tgcattnggc tgggattcaa accatgttac tccntgacca ngtgngncct ntttcaaann 420
angnaaggga aggggnaagn aaaggaaaag nngnagggng atgccgntnn tngnntngna 480
gnngnatnan ntaaaaattt ggggg                                        505
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<210> 329
<211> 559
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (385)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (445)
<223> n equals a,t,g, or c

<220>
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<222> (448)
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<220>
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<220>
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<223> n equals a,t,g, or c

<220>
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<220>
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<222> (503)
<223> n equals a,t,g, or c

<220>
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<222> (505)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (551)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (553)
<223> n equals a,t,g, or c

<400> 329
nnanancctg ggaggcagag tttgcagtga gccgagatgg cgccactgca ctccagcctg 60
ggggacagag cgagactcca tctcaaaaaa aaaaaaaaaa aaaattaaaa attaagttct 120
ttagttgcac tagccatatt tcaaatactt gatggataca tgtggctagt ggctaacata 180
agggatagca cagatataaa acatttcctc ccaaagtgct gggattacag gcatgagcca 240
ccgcgcccgg cctatcatat gaattttgag ggaacacaat catgcagtct gtagcagatg 300
gtaataggct gatatattac acttgttgat gtaanctgga tangtttctt tcttctccaa 360
ggacagcttt ttnaatattt aacantncca ttaatttttc agtttccggg agaattttat 420
aatttaaaat tgccgactta ngganaancc aattggncca accattacaa tanattttta 480
attccgntta aaaaatccca ccngnggggg aattccgctt aaaattttat tttccattat 540
tcccaatggc ntnaattta                                          559

<210> 330
<211> 467
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c

<220>
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<222> (135)
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<220>
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<222> (138)
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<220>
<221> misc feature
<222> (145)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (256)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c

<220>
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<222> (305)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (344)
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<223> n equals a,t,g, or c

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<221> misc feature
<222> (393)
<223> n equals a,t,g, or c
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<220>
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<223> n equals a,t,g, or c


<220>
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<222> (422)
<223> n equals a,t,g, or c


<220>
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<222> (428)
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<220>
<221> misc feature
<222> (440)
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<220>
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<222> (441)
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<220>
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<222> (453)
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<220>
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<222> (456)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (458)
<223> n equals a,t,g, or c

<400> 330
aatnatgctc tgcgtgatga tgttgccgct ggtcgtcgtc ggttgcacat caaagcagtc 60
tgtcagtcag tgcgtgaagc caccaccgcc tccggtggna tgaatgcagc ctcccccga 120
ctggncagac accgntgnaa cgggnattat ttcaccctca gagagaggct gatcactatg 180
caaaaacaac tgggaggaaa cccagaagta tattgaatga gcagtgcaga ttagagttgc 240
```

```
ccatatcgat gggcancaat tgncaattat tgtgnagcaa tacacacggg gtttccangg 300
gagtnttaaa tgccttaaag taattaaaan ccggggcaat nccnttttac ggatgttttg 360
ctggggtttc cgtttttaac caacattttt ntngggggncc gnccacaaat tttggggttg 420
gnattggncg tttttcttn ntggccccat ttnccngnaa acggggg                467
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<210> 331
<211> 418
<212> DNA
<213> Homo sapiens

<220>
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<222> (22)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c

<220>
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<222> (131)
<223> n equals a,t,g, or c

<220>
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<222> (196)
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<220>
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<222> (202)
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<220>
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<220>
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<222> (257)
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<220>

<220>
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<222> (284)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c

<400> 331
gagctgccaa cctggcaatt antgtctgct aagggtnctc tttattcacc cttacttgga 60
cttcctttcc tgtagggaat ctcacgtaaa atgaaatctt ccctccccca aggtgtccgc 120
aatgtngcca ntgtctgtct gcagattggc tacccaactg ttgcatcagt accccattct 180
atcatcaacg ggtacnaacg antcctggcc ttgtctgtgg agacggatta caccttccca 240
cttgctgaan aagtcanggc ttcttggctg atccatctgc cttngtggct gctgcccngt 300
tggctgctgc caccacaact gctcctgctg ctgctgcncc ccancttaag ttnaaaccca 360
agaaaatccg aagatccgan aaagatntgg attgggtctc tttgactaat caccaaaa   418

<210> 332
<211> 486
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (9)

269

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<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (379)
<223> n equals a,t,g, or c

<220>
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<222> (415)
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<220>
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<222> (446)
<223> n equals a,t,g, or c

<220>
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<222> (478)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (486)
<223> n equals a,t,g, or c

<400> 332
acgggaccnt gggaccggcg tcgggggtcg cggggaccat gcagcgganc tccctgccct 60
tcgctatcct gacgctggtg aacgccccgt acaagcgagg attttactgc ggggatgact 120
ccatccggta cccctaccgt ccagatacca tcacccacgg gctcatggct ggggtcacca 180
tcacggccac cgtcatcctt gtctcggccg gggaagccta cctggtgtac acagaccggc 240
tctattctcg ctcggacttc aacaactacg tggctgctgt atacaaggtg ctggggactt 300
cctgtttggg gctgccgtga gccagtctct gacagacctg gccaagtaca tgattgggcg 360
tctgaagccc aattctaanc gtctgcgaac ccgattgaac cggtcaatgc tcgtnatgtg 420
cagtggagaa gtttgcaggg aacctnttga ttcacgagca gtgtttttaa tcggaatntc 480
tttgnn                                                          486

<210> 333
<211> 268
<212> DNA
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<213> Homo sapiens

<220>
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<222> (36)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (260)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c

<400> 333
cccacgctgt ccgatgattt gtcacaatct tatcantaat cattactctg tttttatat 60
ttcaactana agtatcanaa tatagcnttc cagaaaaccc cgaancanag tcactgacta 120
catcaaagtc tactacacct tgagaaaaca aatgaacgan aatctatttt cctcattcat 180
taccccaaca ataataggac tccctatcgt aattattntc actatgtttc caagcattga 240
tatncccatc acctacccgn ctnntcaa                                     268

<210> 334
<211> 517
<212> DNA
<213> Homo sapiens

<220>
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<222> (214)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (410)
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272

<220>
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (463)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (489)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (496)
<223> n equals a,t,g, or c

<400> 334
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cggaaaggag cgcctactaa ggacgccgtc gaggtccggg gcgcctcaac tctatagctc   60
taactggcta gaagtgccca acgtggaatg tttctttttt aaaggcggct cttgaagcga  120
cccggaagcg gaagtggaag aaagttctag tggcttgaga ttaagcctga tcaagatgac  180
aacctcccaa aagcaccgag acttcgtggc agancccatg ggggagaacc agtggggaac  240
ctggctggga ttggtgaant cctgggcaag aaactggaag aaagggtttt gacaaggcta  300
tnttgtcttg gccatttctg gtgctaaaaa anataaaaac tctcccggaa tggtgaaaan  360
cttttttggc cacccaacat cccgaatgtc cgatgctcca aaatgtgcan cctcttttat  420
gtctttggaa tctctncccc cccccnatt tgaccaattg gancccctt cctcaagaaa  480
atgttgttnc ccccanttcc ggttttgatt tccccac                          517
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<210> 335
<211> 297
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (19)
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<220>
<221> misc feature
<222> (155)

273

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c

<220>
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<222> (224)
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<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (245)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (265)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c

<400> 335
ctccgcaaat tgaaccctnc actcaaaggg aaacaaaagc tggagctcca ccgcggtgac 60
ggccgctcta gaactagtgg ggggcccggt acccaattcg ccctatagtg agtcgtatta 120
caattcactg gccgtcgttt tacaacgtcg tgacnnggaa aacntnnaat ncttccggct 180
cgtatgttgt gtggaattgt nagcggataa caattcacac aggnancagc tataaccatg 240
attnnnccaa gntcgaaatt aaccntnact aaaggggaca aaagtngggg ctccacg   297

<210> 336
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (148)

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (261)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (265)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (304)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (322)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
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<220>
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<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c

<400> 336
gatgggcagc gactacatcc gtgaggtgaa tgtggtgaag tctgcccgtn tcggttattc 60
caaaatgctg ctgggtgttt atgcctactt tatagagcat aagcagcgca acacccttat 120
ctggttgncg acggatggtg atgcccgnga actttatgaa aaacccacgt tgagcccgac 180
tattngngat attccgtcgn tgcntggggc tggccccgtg gtatggcaaa aaagcaccgg 240
gttnaacaag ntcaaccatg naagngtttc anctnaatgg gggggncccc gtaacccaat 300
tngncctata agtnnatggg antttaanaa ttcaatnggc cctngntttt aaatggtgng 360
tgntnggcct ttttttttttn gtttgt   386

<210> 337
<211> 506
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c

<220>
<221> misc feature

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<222> (360)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (437)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (471)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (481)
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279

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (483)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (501)
<223> n equals a,t,g, or c

<400> 337
aattcggcag agnattgaca tcaggaagga cctctatgct aacaatgtcc tatcaggggg 60
caccactatg taccctggca ttgccgaccg aatgcagaag gagatcacgg ccctagcacc 120
cagcaccatg aagatcaaga tcattgcccc tccggaggcg caaatactct gtctggatcg 180
gtggctccat cctggcctct ctgtccacct tccagcagat gtggatcagc aaacagggaa 240
tacggtgaag ccgggccttc cattgtccac cgcaaatgct ttcttaaaac acttttcctg 300
gttcctnttc tgtcttttag gcacacaact gtggaatgtn cctgtgggaa tttatggccn 360
tttcagtttc tttttccaaa tcattcctag ggccaaagtt ttgnattggt tnanccatgg 420
ggttttttta aataaantnt ggaaataggg ttaattggtt aaaaaaaann nnaaaaaaaa 480
ntntgggggg gggggcccg ntaccc   506

<210> 338
<211> 623
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (508)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (509)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (513)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (537)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (565)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (597)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (599)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (612)
<223> n equals a,t,g, or c

<400> 338
gcggaacttg ctactaccag caccatgccc taccaatatc cagcactgac cccggagcag 60
aagaaggagc tgtctgacat cgctcaccgc atcgtggcac ctggcaaggg catcctggct 120
gcagatgagt ccactgggag cattgccaag cggctgcagt ccattggcac cgagaacacc 180
gaggagaacc ggcgcttcta ccgccagctg ctgctgacag ctgacgaccg cgtgaacccc 240
tgcattgggg gtgtcatcct cttccatgag acactctacc agaaggcgga tgatgggcgt 300
cccttccccc aagttatcaa atccaagggc ggtgttgtgg gcatcaaggt agacaagggc 360
gtggtccccc tggcagggac aaatggcgag actaccaccc aagggttgga tgggctgtct 420
gagcgctgtg cccagtacaa ngaaggacgg agctgacttc ggccaagtgg cgttgtgtgc 480
ttaagaatgg gggaacacac ccccctcannc ctnggcatca tggaaaatgc caattgntct 540
ggccccgtat gccagtatct ggcancagaa tgcattgggc cattcgggga gtctgananc 600
tcctgatggg ancatgactt gaa 623

<210> 339
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (157)
<223> n equals a,t,g, or c

<220>

281

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<221> misc feature
<222> (171)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c


<400> 339
tcgacccacg cgtccgcttc aacatgattt gtcacaatct tatcaataat cattactctg 60
tttttttatat ttcaactaaa agtatcanaa tatagctttc cagaaaaccc cgaaccaaag 120
tcactgacta catcaaagtc tactacacct tggaganaac aaatgaacga naatctattt 180
tcctcattca ttaccccaac aataataggn ctccctatcg taattattat cactatgttt 240
ccaagcatta tattcccatc acctacccga ctaatcaata atcgactcat ctccattnca 300
acaatggatt agtgcantga acatgcaaan gcaaggatta tcnn            344


<210> 340
<211> 345
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
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282

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<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
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283

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<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c

<400> 340
agacangctc tantacgact cactataggg naaagctggt acgcctgcag gtaccggtcc 60
ggaattcccg ggtcgaccca cgcgtccngn aggaggggac agctgcgggc gcggggaggg 120
ggcgccgngc cgcgnggngc catggnggac agnagagccg ggagtccgag anncgggccc 180
gcagcccgag atgtcgccgc catggcttcg ccgcagctct gccgcgcgct ggtgtcggcg 240
caatgggtgg cggaagcgct gcgggccccg cgcgctgggg cagcctctgc agctgntagg 300
acgcctcctg gtnacctggc cggaagctgg ggggcgcgna cgncn            345

<210> 341
<211> 170
<212> DNA
<213> Homo sapiens

<220>
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<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (23)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<400> 341
acccacgcgt ccgcccacgn tcncgactag ttctagatcg cgnacggccg ctctagagga 60
tccaagctta cttggacatg catgcnacgt catagctctt ctatagtgtc acctaaattc 120
aattcactgg ccgtcgtttt acaacgtcgt gactgggaan atnntaaaan          170

<210> 342
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c

<400> 342
aatgacttgg ttgagtactc accagtcaca gaaaagcatc ttacggatgg catgacagta 60
agagaattat gcagtgctgc cataaccatg agtgataaca ctgcggccaa cttacttctg 120
acaacgatcg gaggaccgaa ggagctaacc gctttttttgc acaacatggg ggatcatgta 180
actcgccttg atcgttggga accggagctg aatgaagcca taccaaacga cgagcgtnac 240
accacgatgc ctgtagcaat ggcaacaacg ttngcaaact attaactggc ggactactta 300
ctctagcttc ccggcaacaa tttatagnct tggtggnggc gggtaaagtt ncaaggccca 360
tttttnggtt tggccttccg gttngtt                                     387

<210> 343
<211> 186
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c

<220>
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<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c

<400> 343
gctgcaggaa attaacagag tctacnagga aatgtacaag actgatctgg agaaagacat 60
tatntcggac ncatctggtg acttccgcaa gctgatggtt gccctggcna aaggttaaaa 120
aacagaagaa tggtccgtcc ttgaatatga anngaatgan ccacatgccc ggatttcctt 180
ganccc                                                              186

<210> 344
<211> 611
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

<220>
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287

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<221> misc feature
<222> (285)
<223> n equals a,t,g, or c

<400> 344
tgcaaggnga nactaccctc actaaaggga acaaaagctg gagctccacc gcggtgcggc  60
cgctctagaa ctagtggatc ccccgggctg caggaattcg gcacgagctg cgttgggctc 120
cgggaagccg ttcgggctgg ggctgtcggc cgcggggcgg aggcactcgc gcggggggatg 180
gcccactgcg tgaccttggt tcagctgtcc atttcctgtg accatctcat tgacaaggac 240
atcggctcca agtctgaccc actctgcgtc cttttacagg atgtnggagg gggcagctgg 300
gctgagcttg gccggactga acgggtgcgg aactgctcaa gccctgagtt ctccaagact 360
ctacagcttg agtaccgctt tgagacagtc cagaagctac gctttggaat ctatgacata 420
gacaacaaga cgccagagct gagggatgat gacttcctag ggggtgctga gtgttcccta 480
ggacagattg tgtccagcca ggtactgact ctccccttga tgctgaagct ggaaaacctg 540
ctgggcgggg gaccatcacg gtctcagctc aggaattaaa ggacaatcgt gtagtaacca 600
tggaggtaga g                                                     611

<210> 345
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (329)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c

<400> 345
tttccttcta cagtattcct gaatttgacg aatggaaaaa acatatagaa aaccagaaag  60
cctggaaaat aaagtactat aaaggattgg gtactagtac agctaaagaa gcaaaggaat 120
attttgctga tatggaaagg catcgcatct tgtttagata tgctggtcct gaagatgatg 180
```

288

```
ctgccattac cttggcattt agtaagaaga agattgatga cagaaaagaa tggttaacaa 240
attttatgga agaccggaga cagcgtagct acatggctta ccagaggant gattcnctct 300
caactcagac atgaaagatc tataccacnc ntgttgatgg cntt              344
```

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<210> 346
<211> 506
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (452)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (480)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (495)
<223> n equals a,t,g, or c

<400> 346
ggaaaagccc aaggaaaaag caaagaatag caaaaaaaag ggggccaaga aggaagtggt 60
tgggattggt cttctttttt cttcagtgag ttttttcccc aacaggttct gatggtcctt 120
tggctaccag caaaccagtc cctgcagaaa agtcaggtct tccagtgggt cctgagaacg 180
gagtagaact ttccaaagag gagctgatcc gcaggaagcg cgaggagttc attcagaagc 240
atgggagggg tatggagaag tccaacaagt ccacgaagtc agatgctcca aaggagaagg 300
gcaaaaaagc accccgggtg tgggaactgg gtggctgtgc taacaaagaa atgttggatt 360
acagtacttc caccaccaat ggaaccctg angcttgcct tgtctgagga cattaacctt 420
gattccaagg gactgggtct gggggggcact tnnggatctg gactgcacac tntgatgacn 480
aagggcttgt taaantttcc aaacta              506
```

```
<210> 347
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289

```
<211> 444
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c

<400> 347
cggaagggag accatgttcc gagcggcggc tccggggcag ctccggcggg cggcctcatt 60
gctacgattt cagagtaccc tggtaatagc tgagcatgca aatgattccc tagcacccat 120
tactttaaat accattactg cagccacacg ccttggaggt gaagtgtcct gcttagtagc 180
tggaaccaaa tgtgacaagg tggcacaaga tctctgtaaa gtagcaggca tagcaaaagt 240
tctggtggct cagcatgatg tgtacaaagg cctacttcca gaggaactna caccattgat 300
tttggcaact cagaagcagt tcaattacac acacatctgt gctggagcat ctgccttcgg 360
aaagaacctt ttgcccagag tagcagccaa acttgaggtt gccccgattt ctgacatcat 420
tgcaatcaag tcacctgaca catt                                      444

<210> 348
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<222> (301)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c

<400> 348
ggcagagaag cagaagcgnc tcagttagag tccagcaaaa ggtttgccaa anagtttatg 60
gacagacatg gaatcccaac cgcacaatgg gaaggctttc accaaacctg aaaggaagcc 120
tgcagcttca tttttgagtgc agacttccct gctttggttg tgaaaggcca gtggtcttgc 180
agctggnaaa aggggtgatt gttgcaaaga gcaaagaaga ggcctgcaag ctgtacaaga 240
gatcatgcag gtaggctggg tcttctggaa aaatttactn ttgtattcat actgnatgaa 300
ntaccgtttt aagtttnaaa aatgttcctc acattaaggg aaattctntt ttgcaacc   358

<210> 349
<211> 321
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (206)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c
```

291

```
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<400> 349
ggcgctttgc tctgtccacc aagattcctg acaccaaagg ctgcttgcag tgtcgtgtgg 60
tgcggaaccc ctacacgggt gccaccttcc tgctggccgc cctgcccacc agcctgctcc 120
tgctgcagtg gtatgagccg ctgcagaagt ttctgctgct gaagaacttc tccagccctc 180
tgcccanccc agctgggatg ctgganccgc tggtgctgga tgggaaggag ctgccgcagn 240
gttttttttgg ggccgaaggg cctaaagggc ccggttgccg gttcctgttc caanncctgc 300
ncctgggagg ttggcnttaa g                                          321

<210> 350
<211> 742
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (618)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (653)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (658)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (683)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (689)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (702)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (707)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (714)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (719)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (722)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (734)
<223> n equals a,t,g, or c

<400> 350
ggtcacgctg acccagtgct cggaaaagct ggtgcagctc atcctgcacg aatacaagat 60
cttcaatgca gaagtgcttt tccgagaaga ctgctccccg gacgagttca tcgatgtgat 120
cgtgggcaac cgggtgtaca tgccctgcct gtatgtttat aacaaaatcg accagatctc 180
catggaagag gtggaccgcc tggcccgaaa acccaacagt gtggtcatca gctgcggcat 240
gaagctgaac ctggactatc tgctggagat gctctgggag tacttggccc tgacctgcat 300
ctacaccaag aagagaggac agaggccaga cttcacagac gccatcattc tccggaaagg 360
ggcctcagtg gagcacgtgg gcaccagcac caagtacagt ccgcagcggg tgggcctgac 420
ccacaccatg gagcatgagg acgtcatcca gatcgtgaag aagtaacggc gcctgccggg 480
ccttccgccc acctgctcgt ctcccttggg aggtggtccc actgggacac acaaacaccc 540
aaacagaaaa atacaaatac acgtaccccca agaaggggtc cctcaagtct ctgctattta 600
cagaagtttc ttcagtangc agaccaaaaa tgtgttgggc aaaagggctc ggntggangc 660
attttccata agactgagcc ctnttcatng ggggtttga gnttgantgc ttancctgna 720
tntgtgcctc caanccccctg ac   742

<210> 351
<211> 272
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c

<400> 351
aatcaggcgg gactgacggc agatcgtatg ctggtcctgt ccagagccgg gcaggcggca 60
gggctgacgt ttaaccagac cagcgagtca ctcagcgcac tggttaaggc gggggtaagc 120
ggtgaggctc agattgcgtc catcagccag agtgtggcgc gtttctnctc tgcatccggc 180
gtggaggtgg acaaggtcgt tgaagccttc gaggggggcc cgtacccatt tgcctatagt 240
aagcgtatta naataattgc cgtgttttaa an                               272

<210> 352
<211> 256
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<400> 352
gcagacgtcc agagcagagt cagccagcat gaccgagcgc cgcgtcccct tctcgctcct 60
gcggggcccc agctgggacc ccttccgcga ctggtacccg catagccgcc tcttcgacca 120
```

```
ggccttcggg ctgccccggc tgccggagga gtggtcgcag tggttaggcn gcagcagctg 180
gccaggctac gtgcgccccc tgcccccgc cgcatcgaga gccccgcagt ggccgngccc 240
gctacagncg nncgct                                                  256
```

```
<210> 353
<211> 592
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (480)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (522)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (545)
<223> n equals a,t,g, or c

<400> 353
ggttcccttc cacgctgtgg aagcattgta ctttnggtct tcatgataaa tctngctgct 60
```

295

```
gctcactcgt tgggtccgtg ccacctttaa aanctgtaac actcaccgcg aaggtctgca 120
acttcactcc tggggccagc aagaccacga gtgcaccgag aggaatgaac aactctggac 180
acaccatctt taagaaccgt aatactcacc gcaagggtct gcaacttcat tcttgaagtc 240
agtgaggcca agaacccatc aattccgtac acatttnggt gactttgaag agactgtcac 300
ctatcaccaa gtggtgagac tattgccaag cagtgagact attgccaagt ggtgagacca 360
tcaccaagcg gtgagactat cacctatcgc caagtggtcc taagtgtgaa cgtgaagtcc 420
ccagccctgc tgctgagcca gttgctgccc tacatggaga acaagaaggg tgctgtcatn 480
ctggnctctt ccattgcagc ttataatcca gtagtggcgc tnggtgtcta caatgtcagc 540
aaganagagc tgctggggtc tcactagaac actggcattg ggcttggccc cc          592
```

<210> 354
<211> 539
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c

<400> 354
```
cacnaaccct cactaaaggg aacaaaagct ggagctccac cgcggtgacg gccgctctag 60
aactagtgga tcccccgggc tgcaggaatt cggcacgagt cgtctcaggc tcgtagttcg 120
ccttcaacat gccggaacca gcgaagtccg ctcccgcgcc caagaagggc tcgaagaaag 180
ccgtgactaa ggcgcagaag aaggacggca agaagcgcaa ggnanccgca aggagagcta 240
ctccgtatac gtgtacaagg tgctgaagca ggtccacccc gacaccggca tctcctctaa 300
ggccatggga atcatgaact ccttcgtcaa cgacatcttc gaacgcatcg cgggtgaggc 360
ttcccgcctg gcgcattaca acaagcgctc gaccatcacc tccagggaga tccagacggc 420
cgtgcgcctg ctgctgcccg gggagttggc caagcacgcc gtgtccgagg gcaccaaggc 480
cgtcaccaag tacaccagcg ctaagtaaac ttgccaagga gggactttct ctggaattt 539
```

<210> 355
<211> 435
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c

296

<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (419)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (422)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c

<400> 355
gcttcgctca cctgcccaag agtacctttg tgttggatga atttaagcgc aagtactcca 60
atgaggacac actctctgtg gcactgccat atttctggga gcactttgat aaggacggct 120
ggtccctgtg gtactcagag tatcgcttcc ctgaagaact cactcagacc ttcatgagct 180
gcaatctcat cactggaatg ttccagcgac tggacaagct gaggaagaat gccttcgcca 240
gtgtcatcct ttttggaacc aacaatagca gctccatttc tggagtctgg gtcttnccng 300
gccaggagct tgcctttccg ctgagtccag attggcaagt ggactacgaa gtcatacaca 360
tggcggaaac tggatctggc aagcgaggag acccanacgc tggttcgaga gtacttttnc 420 ·
nngngagggg gcctt   435

<210> 356
<211> 502
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>

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<221> misc feature
<222> (168)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c

<220>
<221> misc feature
```

298

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<222> (324)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c

<220>
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<220>
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<223> n equals a,t,g, or c

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<222> (397)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (403)
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<223> n equals a,t,g, or c

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<222> (426)
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<222> (437)
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<222> (440)
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<222> (442)
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<222> (449)
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<221> misc feature
<222> (452)
<223> n equals a,t,g, or c

<220>
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<222> (457)
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (461)
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<222> (476)
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<220>
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<222> (478)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c
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301

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<220>
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<222> (497)
<223> n equals a,t,g, or c

<220>
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<222> (499)
<223> n equals a,t,g, or c

<400> 356
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gaagaatgaa cagaagggag agaagattcc tcggtgcttg ccagtttgtg ggaagcccgt 120
gaaccccgtg gaacagaggc agcgcatcat cggagggcaa aaagccangg ggatagtggg 180
ggcgtttttg cagtaaggga cccgaacact gatcgctggg tggccacggg catcgtgtnc 240
ctngggcatc gngtgcagca gggccttatg gcttnttaca ccaaagtnct cnaacttncg 300
tggccttgga tcaagnnaga cctngganca ggaggactnc cgccccanca ttcactaggt 360
tccnaatcca gngagcagtt tcgcanaaan canccanaca cancttcccc ctntttngnn 420
acccnncagn gtctctnttn anatncctnc tngcacnnna ncccacaacc cccccncncc 480
ccccnccccc cccccncncc cc                                        502


<210> 357
<211> 440
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (300)
<223> n equals a,t,g, or c
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302

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<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c

<220>
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<222> (387)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (389)
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<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c

<220>
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<221> misc feature
<222> (426)
<223> n equals a,t,g, or c

<400> 357
aatatatcga acagtcaggt taacaggctg cggcattttg tccgngccgg gcttcgctca 60
ctgttcaggc cggagccaca gaccgccgtt gaatgggcgg atgctaatta ctatctcccg 120
aaagaatccg cataccagga agggcgctgg gaaacactgc cctttcagcg ggccatcatg 180
aatgcgaatg ggcagcgact acatccgtga gtggaatgtg gtgaagtttg cccgtntcgg 240
ttattccaaa atgctgctgg gngtttatgc ctactttata gggcataagc agnggaacan 300
ccttatttgg tttccncagg atggtggatg cccgagaant ttttggaaaa cccacgttgn 360
gncgattatt tcggggganat ttccggngnt gttggggttt gnccccntgg gttttggnaa 420
aaaganccgg gtaaaaggtt   440

<210> 358
<211> 234
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c

<220>
<221> misc feature

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<222> (208)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c


<400> 358
ggaaagggtg tttatncctc atggactaat tatggacagg actgancgtt ttgctcgaaa 60
tgtgatgaag gagatgggag gccatcacat tntagtcctc tttttgctca aggggggcta 120
taaatttttt gctgacctgc tggattacat caaaggactg antagnaaat agtgnataga 180
tccattcctc atgaactgtg gatttttngc agatctgaag agctattgtn atga      234


<210> 359
<211> 668
<212> DNA
<213> Homo sapiens


<220>
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<222> (15)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (512)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (552)
<223> n equals a,t,g, or c


<220>
<221> misc feature
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305

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<222> (558)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (559)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (579)
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<220>
<221> misc feature
<222> (588)
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<222> (593)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (659)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (667)
<223> n equals a,t,g, or c


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ctgactccag tttgntatnn ccatgattac gccaagctct aatacgactc actataggga 60
aagctggtac gcctgcaggt accggtccgg aattcccggg tcgacccacg cgtccggggt 120
gtttgaggta cataagaaaa atgtaagggg tgaattcact tattatgaaa tacaagataa 180
tacagggaag atggaagtgg tggtgcatgg acgactgacc acaatcaact gtgaggaagg 240
agataaactg aaactcacct gctttgaatt ggcaccgaaa agtgggaata ccggngagtt 300
gagatctgta attcatagtc acatcaaggt catcaagacc aggaaaaaca agaaagacat 360
actcaatcct gattcaagta tggaaacttc accagacttt ttcttctaaa atctggatgt 420
cattgacgat aatgtttatg gagataaggt ctaagtgcct aaaaaaatgt acatatacct 480
ggttgaaata caacactata catacacacc ancatatata ctagcttgtt aatcctatgg 540
aaatggggta tntggagnnc ttttttaatt tttcatagnt ttttttttnat aanaatggca 600
tattttggat ctacaacttc tatgatttga aaaaatacct taacccttat cttttttgng 660
aaaaaana                                                          668


<210> 360
<211> 401
<212> DNA
<213> Homo sapiens
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306

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<400> 360
caccattacc agcggcggca atcctccggc cttttccctg acaccggacg gaaagctgac 60
cgctaaaaat gcggatatca gtggcagtgt gaatgcgaac tccgggacgc tcagtaatgt 120
gacgatagct gaaaactgta cgataaacgg tacgctgagg gcggaaaaaa tcgtcgggga 180
cattgtaaag gcggcgagcg cggcttttcc gcgccaggtg gaaagcagtg tggactggcc 240
gtcaggtacc cgtactgtca ccgtgaccga tgaccatcct tttgatcgcc agatagtggt 300
gcttccgctg acgtttcgcg gaagtaagcg tactgtcagc ggcaggacaa cgtattcgat 360
gtgttatctg aaagtactga tgaacggtgc ggtgatttat g                    401

<210> 361
<211> 273
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<400> 361
acccgaacac ggcactggtc ggcgtgcagg tggactcgga gcagttcggc agccagcagg 60
tgagccgtaa ttatcatctg cgcgggcgta ttctgcaggt gccgtcgaac tataacccgc 120
agacgcggca atacagcggt atctgggacg gaacgnttaa accggcatac agcaacaaca 180
tggcctggng tctgtgggat atgctgaccc atccgcgcta cggcatgggg aaacgncttg 240
gtgcggcgga tgtggataaa tgggcgctgt atg                             273

<210> 362
<211> 248
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<400> 362
cgtcngtcgg gcgagcgatg atgcggaagg ttacctngat nttttcaaag gnaagataac 60
cgaatcccat ctcngcaagg agctgctgga aaaagtcgag ctgacggagg ataacgccag 120
cagactggag gagttttcga aagantggaa ggatgccagt nataagtgga atgccatgtg 180
ggctntcaaa attnagcaga ccaaagacgn caaacgantt ttattctgct atttagtagt 240
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aagatcag                                                            248

<210> 363
<211> 149
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<400> 363
tgccggactt tcatcgtgag gatgactggt ggcgtaacgg ccagaatctc tatctggata 60
atctggaggc gacggggctg tatcaggtgc cgttgtcagc ggcacagccg ggcgatgtgc 120
tgctgtgctg ntttggntca tcanngncg                                  149

<210> 364
<211> 352
<212> DNA
<213> Homo sapiens

<220>
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<220>
<221> misc feature
<222> (93)
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<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (322)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c


<400> 364
gcanaaagaa aatggcacag taacagctgc caatgccagt acactgaatg atggagcagc 60
tgctctggtt ctcatgacgg cagatgcagc gangaggctc aatgttacac cactggcaag 120
aatagtagca tttgctgacg ctgctgtaga acctattgat tttccaattg ctcctgtata 180
tgctgcatct atggtnctta aagatgtggg attgaaaaaa gaagatattg caatgtggga 240
agtaaatgga agcctttagt ctggttgtac tagcaaacat taaaaatgtt ggagattgga 300
tccccaaaaa gtgaatatnc anggnaggag ctgtttcncn ggggacatcc ca         352


<210> 365
<211> 272
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c


<220>
<221> misc feature
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<222> (42)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (242)
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<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (260)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (261)
<223> n equals a,t,g, or c


<400> 365
aggaaaaagc ccggcctcct ggtggggcag tgccggncac ancntgntgc cctgcagagg 60
ggcttgtgcc gctgctggan tgacagcctt ncgaggcttt gctgtctcgg cacggnaggt 120
ctggcaaacc anggacagac caggnacatg ggaccaaagc cggaacctcc tgctcaacgg 180
gaagtcctan cccaccaaag tgcgcctgat ctggggggc tccctncccc cagtcaagcg 240
gncggcggat gaactggatn nacgccccgg at                                   272


<210> 366
<211> 254
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (208)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c


<220>
<221> misc feature
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312

<222> (244)
<223> n equals a,t,g, or c

<400> 366
ggctctacta ggactcacta tanggaaagc tggtacgcct gcaggtaccg gtccggaatt 60
cccgggtcga cccacgcgtc cgcttctctg cctagaaggg ataatattat cactcttcgt 120
tataataaca atcaccatct taattaacca ccttacatta gccagcataa cccctatcat 180
ccttcttgta tntgcagcct gtgaagcnnc actggggctt atccctttta gttatnatct 240
caantacata cgga   254

<210> 367
<211> 185
<212> DNA
<213> Homo sapiens

<400> 367
gattggattc gacaacaaaa aagacctgct tatctcggtg ggcgatttgg ttgatcgtgg 60
tgcagagaac gttgaatgcc tggaattaat cacattcccc tggttcagag ctgtacgtgg 120
aaaccatgag caaatgatga ttgatggctt atcagagcgt ggaaacgtta atcactggct 180
gctta   185

<210> 368
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (232)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (395)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (399)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c

<220>
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<221> misc feature
<222> (415)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (433)
<223> n equals a,t,g, or c

<400> 368
agnncnatag aaagnacgcc tgcaggnacc ggtccggaat tcccgggtcg acccacgcgt 60
ccggagtgag ccttgaacgc ctggacctgg acctcacagc tgacagccag ccacccgtct 120
tcaaggtctt cccaggcagt accactgagg actacaacct tattgttatn gaacgtggcg 180
ctgccgctgc acnaccggcc agccagggac tgcgcctgca ggaacccctg gngccccacc 240
cctggntggn atggccattg tcaaggagga ggagacggag gctgccattg gagcccctcc 300
tactgccact gagggncctg agaccaaacc tgtgcttatn gctcttgagg agggtcctgg 360
tgctgagggt tcccggctgg actcactagt ggcanaacna ctcnggctgg aagtngtagc 420
tctgagggac tcngccccag tgttggccgg gacctgat   458

<210> 369
<211> 288
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature

315

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<222> (103)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c

<400> 369
gcgctggagc tgctngngca ctgcggcgtg tgcagagagc gcctgcnacc cgaganggag 60
ccccgcctgc ngccctgttt gcactcggcc tgtagtgcct gcntagggcc cgcngccccg 120
ccgccgccaa cagctcgggg gacggcgggg cggcgggcga cggcaccgtg gtggactgtc 180
ccgtgtgcaa gcaacagtgc ttctccaaag acatcgtgga gaatnatttc atgcgtgana 240
gtggcagcaa ggctgccacc gacgcccagg atgcgaacca gtgctgca              288

<210> 370
<211> 292
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
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<222> (53)
<223> n equals a,t,g, or c

<220>
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<222> (60)
<223> n equals a,t,g, or c

<220>
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<222> (61)
<223> n equals a,t,g, or c

<220>
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316

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<223> n equals a,t,g, or c

<220>
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<222> (141)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<400> 370
ccatctttgc attgttcctc atccgcctcc ttgctcgccg cagccgnctc cgncgcgcgn 60
ntcctccgcc gccgcggact ccggcagctt tatcgccaga ntccctgaac tctcgctttc 120
tttttaatcc cctgcatcgg ntcaccggcg tgccccacca tgtcagacgc agccgtagac 180
accagctccg aaatcaccac caaggactta aaggagaaga aggaagtttt ggaaagaggc 240
agaaaatgga agagacggcc ctncttaacg gggaatgcta atttagggaa at        292

<210> 371
<211> 477
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c

<220>
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<222> (342)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
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<222> (399)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c

<220>
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<222> (434)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c

<400> 371
ggcacaggat aattttaagc atttaaatgg aattnatctt tttcactgta ttgatccaaa 60
tggttccaag cataaaagaa cggacagatc aattttatgt tgtttacgaa aaggagaatc 120
tggccagtca tggcaagggt taacaaaaga aagggcaaag cttaattggc ttagtgtcga 180
cttcaataat tgggaaagac tgggaagatg attcaaatga agacatgtct aattttgaat 240
cgtttctctg aggattcaca agacagtgat gatggnaaaa atgccagatc tgggagtaag 300
ggaatattgt ccntcacctg ggttttttgag gaaaggaaaa tnaactttct ctggcaaggt 360
tttccataat ttgngaggaa ttccccgagt ttgttagcnc ctaaagggcn gttatgctcg 420
tatttgnccc actntaaccc ctttttnnca nccggtttgt ttttttaaaa gggcttc   477

<210> 372
<211> 443
<212> DNA
<213> Homo sapiens

<220>
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<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c

<220>
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<222> (74)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c

<220>
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<222> (116)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

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<222> (174)
<223> n equals a,t,g, or c

<220>
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<222> (220)
<223> n equals a,t,g, or c

<220>
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<222> (222)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<222> (293)
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<220>
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<222> (314)
<223> n equals a,t,g, or c

<220>
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<222> (329)
<223> n equals a,t,g, or c

<220>
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<222> (335)
<223> n equals a,t,g, or c

<220>
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<220>
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<220>
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<220>
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<222> (373)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<220>
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<222> (411)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (426)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (430)
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<400> 372
ggcagagcac tgtnaaacta gaacatgcta aatctgttgc ttccagagcc actgtcctcc 60
agaaganatc cttnaccect gtaggaatgt ttttgaaact aaatttnatg aacgtnaaat 120
ttnccagtgg ttattatgaa cttccttgtc gaagttgaaa ggtgaacaac nctnatattg 180
caaataccgt agagcttcag agtgcaagat tctccactgn angttgggca ttcacaaatg 240
ttggatcttt cccaccgtgg gatgaagggt tcagaggcat tgcacccaaa atnacccggg 300
tgaacatacc cagnccaaag cccaggggna cattnatcgn ggacaggccc nccagaattt 360
ggcntgttct ttnccagttg gtaggtgtgg aacttggggt tgaattnatt ncttaaccga 420
attttnccgn ttccttaacc gag   443

<210> 373
<211> 464
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c

<400> 373
cggatccgca ggcgcacgtn gcgatgttgt cctctacagc catgtattcg gctcctggca 60
gagacttggg gatggaaccg cacagagccg cgggcccttt gcagctgcga ttttcgccct 120
acgtttcaa cggaggtact atactggcaa ttgctggaga agattttgca attgttgctt 180
ctgatactcg attgagtgaa gggttttcaa ttcatacgcg ggatagcccc aaatnttaca 240
aattaacaga caaaacagtc attggatgca gcggttttca tggagactgt cttacgctga 300
caaagattat tgaagcaaga ctaaagatgt ataagcattc caataataag gccatgacta 360
cgggggcaat tgctgcaatg ctgtctacaa tcctgtattc aaggcgcttc tttccatact 420
atgtttacaa catcatcggt ggacttgatg aagaaggaaa gggg   464

<210> 374
<211> 369
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c

<400> 374
ggcacagcct ctacagccat gtattcggct cctggcagag acttggggat ggaaccgcac 60
agagccgcgg gcccttttgca gctgcgattt tcgccctacg ttttcaacgg aggtactata 120
ctggcaattg ctggagaaga ttttgcaatt gttgcttctg atactcgatt gagtgaaggg 180
ttttcaattc atacgcggga tagccccaaa tgttgncnna ntaacagaca aacagtcat 240
tggatgcagc ggttttcatg gagactgtct tacgctgaca aagattattg aagcaagact 300
aaagatgtat aagcattcca ataataaggc cntgactacg ggggcaatg ctggcangcn 360
gtnctacan                                                       369


<210> 375
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322

<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c

<400> 375
tacccttcat cactaaaggc cgcctgtgcg tnttttttta cgggattttt ttatgtcgat 60
gtacacaacc gcccaactgc tggcggcaaa tgagcagaaa tttaagtttg atccgctgtt 120
tctgcgtctc tttttccgtg agagctatcc cttcaccacg gaggaaagtc tatctctcac 180
aaattccggg actggtaaac atggcgctgt acgtttcgcc gattgtttcc ggtgaaggtt 240
atcccgttnc cctggcggnt tccacctntg aatttaaggc cgggataatg tcnaagcccg 300
aagcatgnaa gtg   313

<210> 376
<211> 375
<212> DNA
<213> Homo sapiens

<400> 376
cgggttccgg tgaccacgaa ggcggcaaag gcgacggaat ggaggaggtg cctcacgact 60
gtccaggggc cgacagcgcc caggcgggca gaggggcttc atgtcaggga tgccccaacc 120
agcggctgtg cgcttctgga gcggggggcca ctccggacac ggctatagag gaaatcaaag 180

```
agaaaatgaa gactgtaaaa cacaaaatct tggtattgtc tgggaaaggc ggtgttggga 240
aaagcacatt cagcgcccac cttgcccatg gcctagcaga ggatgaaaac acacagattg 300
ctcttctaga catcgatata tgtgggccat cgattcccaa gataatggga ttggaaggag 360
agcaggttca ccaga                                                   375
```

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<210> 377
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c

<220>
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<222> (64)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<222> (98)
<223> n equals a,t,g, or c

<220>
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<222> (112)
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<222> (116)
<223> n equals a,t,g, or c

<220>
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<222> (118)
<223> n equals a,t,g, or c

<220>
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<222> (146)
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<222> (151)
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<220>
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<222> (161)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<222> (193)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<222> (243)
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<220>
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<222> (262)
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<220>
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<222> (263)
<223> n equals a,t,g, or c

<220>
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<222> (264)
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<220>
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<222> (265)
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<220>
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<222> (267)
<223> n equals a,t,g, or c

<220>
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<222> (279)
<223> n equals a,t,g, or c

<220>
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<222> (301)
<223> n equals a,t,g, or c

<220>
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<222> (320)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
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<400> 377
ggcacgagng tggctcnagg gngtcacctt cnntgttacc accgttnaca ccaaaagncg 60
gacngagana gtncagaagc tgtgcccagg ggggcagntc ccattcctgc tntatngnac 120
tgaagtgcac acagacacca acaagnttgc ngaatttctg nangcagtgc tgtgccctcc 180
caggtacccc aanctggcag ctctgaaccc tnantccaac acagctgngc tgganatatt 240
tgncaaattn tctgcctaca tnnnnanttc aaacccagna ctcaatgaca atctggagaa 300
nggactcctg aaagccctgn acgttttagn caattantta acatcccccc nctcagaaga 360
agtggatgan accagtgctg nagtgaaggt gtctctcaga agaagtttnt ggatagcacg 420
agctcaccct gggg   434

<210> 378
<211> 506
<212> DNA
<213> Homo sapiens

<220>
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<222> (133)
<223> n equals a,t,g, or c

<220>
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<222> (294)
<223> n equals a,t,g, or c

<220>
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<222> (367)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

328

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<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (492)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (493)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (496)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (503)
<223> n equals a,t,g, or c

<400> 378
aattttcact cccctcagaa cataacatag taaatggatt gaattatgaa gaatggtttt 60
tatgcgactt accgcagcaa aaataaaggg aaagataagc gctcaataaa cctgtctgtt 120
ttccttaatt ctntgctggc tgataatcat cacctgcagg ttggctccaa ttatttgtat 180
attcataaaa tcgatggaaa aactttctc tttaccaaaa caaatgacaa gagtctggtt 240
cagaagataa atcgctctaa agcttcagtt gaagatatta agaacagcct cgtngatgac 300
ggaatcattg ggattcccat ctttttttgtt tgttgaaggc gacaccattg gttttttgcca 360
gaactgnttt tcgggncggc cacatncgnt tttgacaggt ttttttaatc ggggaaggga 420
ntgtccttaa ggcgtggggn gcngttcagt tggggccctg ttgggggggac cnccaaggng 480
gtggttatgg cnnggntttc atnggc                                    506
```

329

```
<210> 379
<211> 550
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

<400> 379
gacganacna accctcacta aagggaacaa aagctggagc tccaccgcgg tgcggccgct 60
ctagaactag tggatccccc gggctgcagg aattcggcac gaggccatcc agactgagga 120
agacccggaa acttaggggc cacgtgagcc acggccacgg ccgcataggc aagcaccgga 180
agcaccccgg cggccgcggt aatgctggtg gtctgcatca ccaccggatc aacttcgaca 240
aataccaccc aggctacttt gggaaagttg gtatgaagca ttaccactta aagaggaacc 300
agagcttctg cccaactgtc aaccttgaca aattgtggac tttggtcagt gaacagacac 360
gggtgaatgc tgctaaaaac aagactgggg ctgctcccat cattgatgtg gtgcgatcgg 420
gctactataa agttctggga aagggaaagc tcccaaagca gcctgtcatc gtgaaggcca 480
aattcttcag cagaagagct gaggagaaga ttaagagtgt tggggggggcc tgtgtcctgg 540
tggcttgaag                                                      550

<210> 380
<211> 573
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
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<400> 380
aagncnagan agccaaccct cactaaaggg aacaaaagct ggagctccac cgcggtgcgg 60
ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagcg caaagaaggg 120
tggcgagaag aaaaagggcc gttctgccat caacgaaggn taacccgaga atacaccatc 180
aacattcaca agcgcatcca tggagtgggc ttcaagaagc gtgcacctcg ggcactcaaa 240
gagattcgga aatttgccat gaaggagatg ggaactccag atgtgcgcat tgacaccagg 300
ctcaacaaag ctgtctgggc caaaggaata aggaatgtgc cataccgaat ccgtgtgcgg 360
ctgtccagaa aacgtaatga ggatgaagat tcaccaaata agctatatac tttggttacc 420
tatgtacctg ttaccacttt caaaatttct gtgctaaaca gtgttacagt cgccaagagc 480
ccataaaggg agccctcctg gaagtggatg aggccttggg tctcggctct tcattgcttc 540
ctgagctgca gcagatgcct ttacaaccaa gct                                 573
```

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<210> 381
<211> 531
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
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<400> 381
gcagnacnaa ccctcactaa agggaacaaa agctggagct ccaccgcggt gcggccgctc 60
tagaactagt ggatccccg ggctgcagga attcggcacg aggcggcgtt ggcggcttgt 120
gcagcaatgg ccaagatcaa ggctcgagat cttcgcggga agaagaagga ggagctgctg 180
aaacagctgg acgacctgaa ggtggagctg tcccagctgc gcgtcgccaa agtgacaggc 240
ggtgcggcct ccaagctctc taagatccga gtcgtccgga aatccattgc ccgtgttctc 300
acagttatta accagactca gaaagaaaac ctcaggaaat tctacaaggg caagaagtac 360
aagccctgg acctgcggcc taagaagaca cgtgccatgc gccgccggct caacaagcac 420
gaggagaacc tgaagaccaa gaagcagcag cggaaggagc ggctgtaccc gctgcggaag 480
tacgcggtca aggcctgagg ggcgcattgt caataaagca cagtggctga g         531
```

```
<210> 382
<211> 300
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
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<220>
<221> misc feature
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```
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c

<220>
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<222> (59)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (172)
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<220>
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<222> (179)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (184)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (203)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (300)
<223> n equals a,t,g, or c

<400> 382
ngggngtacc acaaatataa ggcaaagagg aactgctggn cangagtacg gggtgtggnc  60
atgaatcctg tggagcatcc ttttggaggt ggcaaccacc agcacatcgg caagccctcc 120
accatccgca gagatgcccc tgctggccgc aaagtgggtc tcattgctgc nngcnggant 180
ggangtctcn ggggaaccaa gantgtgcag gagaaagaga actagtgctg agggcctcaa 240
taaagtttgt gtttatgcca aaaaaaaaaa naaaaaaaaa aaaaaaaaag annaaagagn 300

<210> 383
<211> 475
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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333

<222> (367)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c

<400> 383
atgacgccgg tgcagcgggg gggcccgggg gcctgngtgg ccctgggatg gggaaccgcg 60
gtggcttccg cgaggtttcg gcagtggcat ccggggccgg ggtcgcggcc gtggacgggg 120
ccggggccga ggccgcggac tcgcgnaggc aaggccgagg ataaggagtg gatgcccgtc 180
accaagttgg gccgcttggt caaggacatg aagatcaagt ccctggagga gatctatctc 240
ttctccctgc ccattaagga atcagagatc attgattctt cctgggggct ctctcaagga 300
tgagttttga agatatgcca tgcagaagca gaccctgccg gccacgcacc agttcaagca 360
ttnttgnaac gggattaaat gccactcgtt tggtttaatg nccnagagtg gcacncatcc 420
tgggcaaaac tggcaaattt caagtccttn naagtatggg gaaaatggaa cccaa   475

<210> 384
<211> 127
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (8)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c

<400> 384
caatntgnag accagattcc taaggctgca naggggacag tgggatctat tttaggaccg 60
angagattaa ncagagacac aggcaattgt atgtcagcag ctngatttaa cccacctaaa 120
aggngcg   127

<210> 385
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (203)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (231)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<400> 385
ggcacgaggg atgtgcgacg tgtgcctggn gtagccccga ctcttgtacg gtcggcatct 60
gagaccagtg agaaacgccc cttcatgtgt gcttacccag gctgcaataa gagatatttt 120
aagctgtccc acttacagat gcacagcagg naagcacact ggtgagaaac cataccagtg 180
tgacttnaag gactgtgaac gangtttct cgttcagacc agctcaaaag ncaccaaagg 240
aggacataca ggtgtgaacc attnccagtg taaaattgtt cagcgaaatt ctcccggtcc 300
gaccaacnga ngaccna                                                 317

<210> 386
<211> 433
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (385)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c

<400> 386
tttcaaaagc tatttaggtg acactataga aggtagcctg caggttaccg gtccggaaat 60
tcccgggtcg acccacgcgt ccgccgagag ccttagccga cggaaactgg acactggaac 120
cggcagcgcc atgagactcc tcccccgctt gctgctgctt ctcttactcg tgttccctgc 180
cactgtcttg ttccgaggcg gccccagagg cttgttagca gtggcacaag atcttacaga 240
ggatgaagaa acagtagaag attccataat tgaggatgaa gatgatgaag ccgangtaga 300
agaagatgaa nccacagatt ttgtagaaga taaagaggaa gaagatgtgt ctggtgaanc 360
tgaaacttta ccgagtgcag atacnactat actgttttta aaggngnaga ttttccgcca 420
ataacantgt gaa   433

<210> 387
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (356)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<400> 387
atttgaagca aacaggcagc gcgcgacaat ggcggtcgct cgtgcagctt tggggccatt 60
ggtgacgggt ctgtacgacg tgcaggcttt caagtttggg gacttcgtgc tgaagagcgg 120
gctttcctcc cccatctaca tcgatctgcg gggcatcgtg tctcgaccgc gtcttctgag 180
tcaggttgca gatattttat tccaaactgc ccaaaatgca ggcatcagtt ttgacaccgt 240
gtgtggagtg ccttatacag ctttgccatt ggctacagtt atctgttcaa ccaatcaaat 300
tccaatgctt attanaagga aagaaacaaa ggattatgga actaagcgtc ttgtanaang 360
aatattaatc canganaaac tgtttaatca ttgaaatgtt gtcccan   407

<210> 388
<211> 244
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c

<400> 388
ttcgttcatc tatcggatcg ccacactcac aacaatgagt ggcagatata gcctggtggt 60
tcaggcggcg catttttatt gctgtgttgc gctgtaattc ttctatttct gatgctgaat 120
caatgatgtc tgccatcttt cattaatccc tgaactgttg gttaatacgc ttgagggtga 180
atgcgaataa taaaaaagga gcctgtagct ccctnatgat nttgcttttc atgttcatcg 240

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ttcc                                                                         244
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<210> 389
<211> 239
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
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339

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<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c

<400> 389
nggactggcg tcagacgtcg nattccggcg cccacggtcg gcttaaaccc tggtncaatc 60
ctgncgcccg ncgtgatgcc agggaagaca gggcgacctg gaagtccaac tacttnctta 120
agatcatnca acgtattggg atgattatcc taaaatgggt tcnattggtg ggtagcgagt 180
acganatggt ggggcntcct anagntagta tggcgagcta gagtcccggc taatgttcc  239

<210> 390
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c

<400> 390
tcaangcgca attaaccctc actaaaggga acaaaagctg ggaacgatct ggtntctctg 60
cgcgctgcnc gcacactgag gccgcccggg acaaagcccg gnntcggngc gacctttggt 120
cccggnctca gtgagcgagc gagcgcgcag agagggagtg gccaacttna tcactagggg 180
ttccttgtag tnaatgatta acccgccatg ctacttngnc nacgtagcca tgggntacca 240
agctcgagct ctctagactc gacgcgcgta atacgactca ctatagggcg aatttgagct 300
ccaccgcggt tgcggccgct ctactagagt cgacctcatg gnttnncccc gaaacccgcn 360
aacacccgct gacncgccct ta   382

<210> 391
<211> 375
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<222> (104)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (208)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (261)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (279)
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343

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c

<400> 391
tgcaanngaa tacacactaa ggacaagtgg actcacggtg cgccctcnga ctagtggtcc 60
cgggtgcagn tgccagggtg gcctgagcga tctacggatg ggcngtatgg agtggangag 120
acgagatgcg ggtgttanag cagggnctga ccggagtgnc acacatgagt gtcaggtgca 180
ggtagtccga gtcggcgaca tgagcctnga gtagagtcat cantcgatga gatctggagg 240
caactggcga gcaagaccgt ntggtgcant gtcantcang ctgttgcagg tgagagcant 300
gcactcgtcg agtggcgaga cagatcaatc tctgttagcg ggtggaggtt ncactcgcgc 360
tgtggnggtn cactg 375

<210> 392
<211> 121
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c

<400> 392
gantcatcng agngtgtgga tttgagccgc cgcatttttt aaccctaaat ctcganatgc 60
atcgtgnttc ctgtccattg gactgtaagg tttatgtagg catcttggga acnatggnan 120
a                                                                 121

<210> 393
<211> 83
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c

<220>
```

```
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c

<400> 393
ggcagagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaannccccn ggnggggggcc ccc                                       83

<210> 394
<211> 218
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c

<400> 394
gtcggcgcag aangcgcccc gcaccccccgc caggcgcatg tctgcacctc cgcttgccaa 60
aggnccctcgg tcagcgactg gatgctcgcc atcaaggtcc agtggaagtt cttcaagagg 120
aaaggcgccc ccgccccagg cttccgcgcc cagcgctcgc cacgctcagt gcccgttttta 180
ccaataaact gagcgacccc aaaaaaaaaa aaaaaaag                          218

<210> 395
<211> 83
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c

<400> 395
aattcggcac ngnaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
```

```
aaaaaaaaaa aaaaaaaaaa aan                                          83

<210> 396
<211> 70
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c

<400> 396
aattcggcac agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaana                                                         70

<210> 397
<211> 140
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c

<400> 397
aatttgacca gagaacaaga ataacccggc ctcagcgccg ggttttcttn gcctcangat 60
cgcccccaaa acanataacc aattgtattt atngaaaaat aaatagatac aannnactaa 120
acatagcaat tcagatctnt                                                140

<210> 398
<211> 157
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c

<220>
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```
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c


<400> 398
aattcggcan agctcaagca gacggggctc aaggggggtta catttaataa aaggatgaag 60
atggnaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
nnnccngggg gggncccccc ccccccttn ccccctt                           157


<210> 399
<211> 358
<212> DNA
<213> Homo sapiens


<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c


<220>
<221> misc feature
<222> (305)
<223> n equals a,t,g, or c


<220>
<221> misc feature
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349

```
<222> (308)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c

<400> 399
ggcanagcgg cagaggcggc tcccactctc ggaaccttgt cctgtttttc ccccagctcg 60
gcaagcgcca tatgagcctg gcgncgccaa tagcgaatcc tgttgtgggc tttttggcct 120
attcccgccc ctcagtcttg ccgggatggc accgcccgca taggacttcc agggttgggc 180
tgagtgggag ttcgactgct gggnctngta attctcgctt tggggggctgc tccttccagg 240
ctggggacac actggggccc gttgttcggt ctcccgtcct ccgacatctt gtctggaact 300
tncgnctngc agtttccata ggagttggag nctgtgcggc ntaattttgg tggaaaaa   358

<210> 400
<211> 399
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
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<222> (27)
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<220>
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<222> (33)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
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<222> (70)
<223> n equals a,t,g, or c
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<220>
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<222> (83)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
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<222> (117)
<223> n equals a,t,g, or c

<220>
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<222> (169)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c

<220>
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<222> (216)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (231)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c

<220>
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<222> (245)
<223> n equals a,t,g, or c

<220>
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<222> (248)
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<220>
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<222> (255)
<223> n equals a,t,g, or c

<220>
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<222> (262)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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352

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<222> (349)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c

<400> 400
ttttttttt tttttnaaaag ggcacanata cantttttacc gtttanacca aaccagaatc 60
aaaacccaan tcagagtatc canaaatcca agccaggtca aaaccaaaac gaaantntca 120
agcaatccaa atcaagtcaa aaacaaaaac caaagtgccg gtacaggcnt nccgtgggtg 180
atcaggccac ccttccactc aaatggagtg ggnaantncc aaagactagt nttaccaant 240
ttcanatntc cggantccaa gngcctgtnc cttcccagng ttnagccgct gnattgatcc 300
tctgtgggggg cctgcnaaac gccantctgg cgaggtgttc cactggggna attgcctacc 360
cggnagtgct ctcaggttct gngtccctca agctggcca                          399

<210> 401
<211> 189
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

<400> 401
naattcggca nagcaaacca caccttctct ttcttatgtc tttttactac aaactacaag 60
acaattgttg aaacctgcta tacatgttta ttttaataaa ttgatggcaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa anccnngggg ggggccccccc 180
cccccntt                                                       189

<210> 402
<211> 174
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c

<400> 402
aattcggcan agctgaggca ggagaatcgc ttgaattcgg gaggcagagc tgagatcaca 60
cctctgacac tcnagcctgg gtgacagagc gagactccgt ctnaggnaag gaaaaaaaaa 120
aaaaaaaaan cncgggggggg gccccngtnc ccaattggcc ctatagnggg tcgt      174

<210> 403
<211> 263
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (231)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (260)
<223> n equals a,t,g, or c
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<400> 403
ggcanagcca acccagcagt ccttccctca gctgcctagg aggaagggac ccagctgggt 60
ctgggaccac aagggaggag actgcacccc actgcctctg ggccctggct gtgggcagag 120
gccaccgtgt gtgtcccgag taaccgtgcc gttgtcgtgt gatgccataa gcgtctgtgc 180
gtggagtccc caatgaaacc tgtggtcctg cctgggcaaa aaaaaaaaaa naaaanaaaa 240
anaaagaaaa anaaaaaaan aaa                                       263


<210> 404
<211> 478
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c

<400> 404
tcgacccacg cgtccggggg ctgcagcatg ttgctgagga gtgaggaata gttgagcccc 60
aagtcctgaa gaggcgggcc agccaggctg acatctgtgt ttcaagtggg gctcgccatg 120
ccggggggttc ataggtcact ggctctccaa gtgccagang tgggcaggtg gtggcactga 180
gcccccccaa cactgtgccc tggtggagaa agcactgacc tgtcatgccc ccctcaaacc 240
tcctcttctg acgtgcctnt tgcacccctc ccattaggac aatcagtccc ctcccatctg 300
ggagtcccct tttcttttct accctagcca ttcctggtac ccagccatct gcccaagggt 360
gcccccctcct ctcccatccc cctgccctcg tgggcagccc ggctggtttt gtaaatgtgg 420
gttgtgnaca gtgattttt cttgtattta aaaaaggcca gcattgtggt tcattaaa 478


<210> 405
<211> 223
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
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356

```
<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c

<400> 405
agacagcagg acggtggcca tggaagtcgg aatccgctaa ggagtgtgta acaactcacc 60
tgccgaatca actagccctg aaaatggatg gcgctggagc gtcgggccca tacccgtccg 120
tcgccggcag tcgagagtgg acgggancgg cgggggcngc gcgcgcgcgc gncgtgatgg 180
tgtgcgtcgg agggcggcgg cggcggcggg ggtgtgnggt ccn                   223

<210> 406
<211> 104
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
```

<400> 406
cccacgcntc cgccgacagc agcagcctca ccatgangtt gctgatggtc ctcatgctgg 60
cggccctctc ccagcactgc nacgcaggct ctngctgccc ctna   104

<210> 407
<211> 66
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c

<400> 407
gccctatagt gagtctngta ncaattcact ggccgtcgtt ttacaacgtc gtgacgngga 60
aaactn   66

<210> 408
<211> 278
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> misc feature

358

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<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<400> 408
gggcanagca agctcctgna cctcaagtga tccacatgcc ttggttgacc aaattgctgg 60
gattacaggc atgagccaat atgaccagct caaacatctt cttttaaat gtcagaagca 120
tgtatagtga ttatttctta ttttttcccc cttgatccat ctcaccagat gtttgttgat 180
tttataagaa ttttcaaact accagcttct ggctttgttg aacttgggat ttctgtttca 240
ctaattttct tnctcctgtc ttgtacttac tttgntgg                          278

<210> 409
<211> 168
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>
```

359

```
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c

<400> 409
aataaaactc taaaangatc actataaaaa aagcaggnac gcctgcaggt accggtccgg 60
aattcccggg tcgacccacg cgtccgacgg ctgcgagaag acgacagaag ggcacggctg 120
cgagaanacg acagaagggn gcnantgaaa gaaggcggca gaaaggnt          168

<210> 410
<211> 415
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c

<400> 410
tgaataccta agatttctgt cttggggttt ttggtgcatg cagttgatta cttcttattt 60
ttcttaccaa ttgtgaatgt tggtgtgaaa caattaatga agcttttgaa tcatccctat 120
tctgtgtttt atctagtcac ataaatggat taattactaa tttcagttga gaccttctaa 180
ttggttttta ctgaaacatt gagggaacac aaatttatgg gcttcctgat gatgattctt 240
ctaggcatca tgtcctatag tttgtcatcc ctgatgaatg taaaattaca ctgttcacaa 300
aggtttngtc tcctttccac tgctattaat catggtcact ctccccnaaa tattatattt 360
tttctattaa aagaaaaaaa tggaaaaaaa ttacaaggca atggaaacta ttata    415

<210> 411
<211> 636
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (512)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (519)
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360

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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (544)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (547)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (599)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (603)
<223> n equals a,t,g, or c

<400> 411
gcagatcaga cgtggcgacc cgctgaattt aagcatatta gtcagcggag gagaagaaac 60
taaccaggat tccctcagta acggcgagtg aacagggaag agcccagcgc cgaatccccg 120
ccccgcggcg gggcgcggga catgtggcgt acggaagacc cgctccccgg cgccgctcgt 180
gggggggccca agtccttctg atcgaggccc agcccgtgga cggtgtgagg ccggtagcgg 240
cccccggcgc gccgggcccg ggtcttcccg gagtcgggtt gcttgggaat gcagcccaaa 300
gcgggtggta aactccatct aaggctaaat ccccttgtaa atttaactgt tagtccaaag 360
aggaacagct ctttggacac tangaaaaaa ccttgtagag agagtaaaaa atttaacacc 420
catagtaggc ctaaaagcag ccaccaatta agaaagcgtt caagctcaac acccactacc 480
taaaaaatcc caaacatata actgaactcc tnacacccna ttggaccaat ctatcaccct 540
atanaanaac taatggtagt ataagtaaca tgaaaacatt ctncttcgca taagcctgng 600
tanattaaaa cacttgaact gaccattaac aggcca                              636

<210> 412
<211> 182
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c

<220>
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<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c

<400> 412
ccattgattt ttatcaatag tcgtattcat acggatagtc ctggtattgt tccatcacat 60
tctgaggatg ctcttcgaac tcttcaaatt cttcttccat atatcacctt aaatagtgga 120
ttgcggtant aaagattgtg cctgtctttt aaccacatca ggctcngann gntctcgtga 180
ac   182

<210> 413
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (157)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c

<220>

362

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<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c

<400> 413
tcgacccacg cgtccgccca cgcgtccgcc aagaccaccc tcctttcatt tgctagaagg 60
actcactaga ctcaggaaag ctgttaggct cacagttaca gtttattaca gtaaaaggac 120
agagattaag atcagcaaag ggaggaggtg cacagcnacg ttccacgaca gatgaggcga 180
cggcttccat ctgccctctc ccagtggagc catataggca gcacctgatt ctcacagcaa 240
catgtgacaa canccaagaa gtactgccaa tactgccaac cagagcagct tcactcggag 300
atctttgtgt tccaganttt ttngtttgtc ttggagacag ggtctgggnc ngtttgggca 360
gacnaagagt acatggtgga gattcac                                     387

<210> 414
<211> 276
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (186)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (260)
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<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c

<400> 414
gcaaaggtcc atactggtta cttggtttca ttgccaccac ttagtggatg ttcagtttan 60
aaccattttg tctgctccct ctggaagcct tgcgcatagc ttactttgta attgttggag 120
aataactgct gaatttttag ctgttttgag ttgattcgca ccactgcacc acaactcact 180
atgaanacta tttancttat ttattatctt gtgaaaagta taccatgaaa attttgntca 240
tactgtattt atcaagtatn attaanagca ctagat 276

<210> 415
<211> 192
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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364

<222> (168)
<223> n equals a,t,g, or c

<400> 415
aaaagattgg actaagacac tggccatacc actggacagg gttatgttaa cacctgaaat 60
tgctgggtct tgagagancc caacgcantt ctgggagang gaccacattg gggggtaggt 120
ccacgggctt ggtgatagaa ttatntctcn atcgacttct tgantgcnat atgaactgta 180
acatttgctt ag   192

<210> 416
<211> 439
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (431)
<223> n equals a,t,g, or c

<220>
<221> misc feature

```
<222> (434)
<223> n equals a,t,g, or c

<400> 416
gcgagantnc gacagaaggg tacggctgcg agagacgaca gaagggtacg gctgcgagaa 60
gacnacagaa gggtacggct gcgagaagac gacagaaggg tacggctgcg agaagacgac 120
agaagggtac ggctgcgaga agacgacaga aggtacggct gcgagaagac gacagaagga 180
tacggctgcg agaagacgac agaagggaga atcttagttc aactttaaat ttgcccacag 240
aaccctctaa atccccttgt aaatttaact gttagtccaa agaggaacag ctctttggac 300
actaggaaaa aaccttgtag agagagtaaa aaatttaaca cccatagtag gcctaaaagc 360
agccaccaat taagaaagcg ttcaaagctc aacacccact acccanaaaa taaaaanaaa 420
naaaaacccg nggnccgct                                              439

<210> 417
<211> 155
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c

<400> 417
gacatcttnt tggtttttat tttgaaacaa tttttaggct tgttccgggg gtctctgtgc 60
tgcctgtact gtattgacct gttntatagg tgcctttta ttaaaaagaa aattcaaaaa 120
```

```
annaaaaaaa aaattaataa aanaaaaaaa aanca                              155
```

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<210> 418
<211> 291
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c

<400> 418
gaaaaaagaa atccatatct taaagaaaca gctttcaagt gcctttctgc agtttttcag 60
gagcgcaaga tagatttgga ataggaataa gctctagttc ttaacaaccg acactcctac 120
aagatttaga aaaaagttta caacataatc tagtttacag aaaaatcttg tgctagaata 180
ctttttaaaa ggtattttga ataccattaa aactgctttt ttttttccag caagtatcca 240
accaacttgg ttctgcttca ataaatcttt ggaaaaacta atttnnanna n          291
```

```
<210> 419
<211> 340
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (315)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 419
Val Xaa Asp Trp Phe Leu Trp Tyr Val Lys Lys Cys Gly Gly Thr Thr
 1           5               10              15


Arg Ile Ile Ser Thr Thr Asn Gly Gly Gln Glu Arg Lys Phe Val Gly
             20              25              30


Gly Ser Gly Gln Val Ser Glu Arg Ile Met Asp Leu Leu Gly Asp Arg
         35              40              45


Val Lys Leu Glu Arg Pro Val Ile Tyr Ile Asp Gln Thr Arg Glu Asn
     50              55              60


Val Leu Val Glu Thr Leu Asn His Glu Met Tyr Glu Ala Lys Tyr Val
 65              70              75              80


Ile Ser Ala Ile Pro Pro Thr Leu Gly Met Lys Ile His Phe Asn Pro
             85              90              95


Pro Leu Pro Met Met Arg Asn Gln Met Ile Thr Arg Val Pro Leu Gly
             100             105             110


Ser Val Ile Lys Cys Ile Val Tyr Tyr Lys Glu Pro Phe Trp Arg Lys
         115             120             125


Lys Asp Tyr Cys Gly Thr Met Ile Ile Asp Gly Glu Glu Ala Pro Val
     130             135             140


Ala Tyr Thr Leu Asp Asp Thr Lys Pro Glu Gly Asn Tyr Ala Ala Ile
145             150             155             160


Met Gly Phe Ile Leu Ala His Lys Ala Arg Lys Leu Ala Arg Leu Thr
             165             170             175


Lys Glu Glu Arg Leu Lys Lys Leu Cys Glu Leu Tyr Ala Lys Val Leu
             180             185             190


Gly Ser Leu Glu Ala Leu Glu Pro Val His Tyr Glu Glu Lys Asn Trp
         195             200             205


Cys Glu Glu Gln Tyr Ser Gly Gly Cys Tyr Thr Thr Tyr Phe Pro Pro
     210             215             220


Gly Ile Leu Thr Gln Tyr Gly Arg Val Leu Arg Gln Pro Val Asp Arg
225             230             235             240


Ile Tyr Phe Ala Gly Thr Glu Thr Ala Thr His Trp Ser Gly Tyr Met
             245             250             255
```

```
Glu Gly Ala Val Glu Ala Gly Glu Arg Ala Ala Arg Glu Ile Leu His
        260             265             270

Ala Met Gly Lys Ile Pro Glu Asp Glu Ile Trp Gln Ser Glu Pro Glu
        275             280             285

Ser Val Asp Val Pro Ala Gln Pro Ile Thr Thr Thr Phe Leu Glu Arg
    290             295             300

His Leu Pro Ser Val Pro Gly Leu Leu Arg Xaa Ile Gly Leu Thr Thr
305             310             315             320

Ile Phe Ser Ala Thr Ala Leu Gly Phe Leu Ala His Lys Arg Gly Leu
        325             330             335

Leu Val Arg Val
        340




<210> 420
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 420
Thr Arg Asp Leu Val Ser Phe Ile Ser Gly Ile Arg Leu Tyr Asn Leu
  1             5              10              15

Met Leu Ser Val Leu Arg His Lys Arg Gln Asn Val Ala Tyr Phe Arg
         20             25             30

Ile Cys Phe Phe Ile Glu Val Ser Gly Ile Leu Ser Lys Ile Val Xaa
        35             40             45

Ser Arg His Cys Ser Leu Cys Ser Ser Gly Thr Ser Cys Pro Leu Leu
    50             55             60

Ser Leu Gln Ala Thr Gly Asn Ala Ser Val Leu Val Ser Trp Arg Lys
65             70             75             80

Ile Thr Trp Gly Glu Gly Thr Ser Cys Gly Lys Ser Lys Cys Arg Tyr
             85             90             95

Glu Met Arg Arg Leu Pro Gln Leu Lys Val Asp Lys Ser Ala Leu
```

369

```
                100                 105                 110



<210> 421
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 421
Xaa Ile Trp Cys Ile Ile Cys Lys Glu Ser Lys Met Met Ser Phe Pro
  1               5                  10                  15


Arg Gly Met Asn Leu Arg Asn Ala Phe Asp Gly Asp Val Ser Val Thr
             20                  25                  30


Leu Cys Tyr Ser Gly Ser Ser Asn Asn Ser Lys Ala Asn Tyr Ser Lys
             35                  40                  45


Cys Lys Ile Phe Leu Phe Pro Arg Phe Thr Phe Val Trp
     50                  55                  60



<210> 422
<211> 51
<212> PRT
<213> Homo sapiens

<400> 422
Thr His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln Trp
  1               5                  10                  15


Arg Ala Trp Met Gln Lys Ser His Lys Thr Arg Asn Gln His Arg Thr
             20                  25                  30


Arg Gly Ser Cys Pro Arg Ala Asp Gly Ala Arg Arg Glu Val Leu Pro
             35                  40                  45


Asp Lys Leu
     50



<210> 423
<211> 246
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 423
Thr Arg Asn Asp Met Lys Ala Asp Cys Ile Leu Tyr Tyr Gly Phe Gly
 1               5                  10                  15

Asp Ile Phe Arg Ile Ser Ser Met Val Val Met Glu Asn Val Gly Gln
            20                  25                  30

Gln Lys Leu Tyr Glu Met Val Ser Tyr Cys Gln Asn Ile Ser Lys Cys
         35                  40                  45

Arg Arg Val Leu Met Ala Gln His Phe Asp Glu Val Trp Asn Ser Glu
    50                  55                  60

Ala Cys Asn Lys Met Cys Xaa Asn Cys Cys Lys Asp Ser Ala Phe Glu
65                  70                  75                  80

Arg Lys Asn Ile Thr Glu Tyr Cys Arg Asp Leu Ile Lys Ile Leu Lys
                85                  90                  95

Gln Ala Glu Gly Xaa Gly Met Glu Lys Leu Thr Pro Ile Gly Asn Trp
            100                 105                 110

Ile Asp Ser Trp Xaa Gly Lys Gly Ala Ala Lys Leu Arg Val Ala Gly
         115                 120                 125

Val Val Ala Pro Thr Leu Pro Arg Glu Asp Leu Glu Lys Ile Ile Ala
    130                 135                 140
```

```
His Phe Xaa Ile Gln Gln Tyr Leu Lys Glu Asp Tyr Ser Phe Thr Ala
145             150             155             160

Tyr Ala Thr Ile Ser Tyr Leu Lys Ile Gly Pro Lys Ala Asn Leu Leu
            165             170             175

Asn Asn Glu Ala His Ala Ile Thr Met Gln Val Thr Lys Ser Thr Gln
        180             185             190

Asn Ser Phe Arg Ala Glu Ser Ser Gln Thr Cys His Ser Glu Gln Gly
        195             200             205

Asp Lys Lys Met Glu Glu Lys Asn Ser Gly Asn Phe Gln Lys Lys Ala
    210             215             220

Ala Asn Met Leu Gln Gln Ser Gly Ser Lys Asn Thr Gly Ala Lys Lys
225             230             235             240

Arg Lys Ile Asp Asp Ala
            245
```

```
<210> 424
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 424
Asp His Trp Pro Arg Pro Glu Trp Leu Pro Cys Thr Ser Trp Arg Arg
 1               5               10              15

Ala Ser Cys Leu Asn His Val Asn Cys His His Leu Ala Thr Pro Ala
            20              25              30

Pro Ala Ser Ala Leu Pro Pro Phe Pro Pro Ser Trp Ser Gly Gly Tyr
        35              40              45

Arg Ser Leu Gly Pro Thr Leu Ala Pro Leu Ser Pro Ala Ser Val Cys
    50              55              60

Leu Thr Val Phe Pro Pro Leu Pro Gln Leu Arg Cys Xaa Pro Gln Ala
65              70              75              80

Trp Cys Cys Leu Gly Gly Leu Gly Glu Gly Val Cys Gly Gly Gly Arg
                85              90              95
```

372

```
Arg Val Lys Thr Glu Ala Arg Cys Gln Asn Gly Leu Glu
            100                 105
```

<210> 425
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 425
```
Gly Ser Glu Thr Xaa Lys Tyr Leu Val Glu Asp Lys Arg Leu Gly Leu
 1               5                 10                 15

Tyr Thr Trp Leu Cys Thr Asp Leu Leu Ser His Ile Gly Asn His His
            20                 25                 30

Thr Leu Gln Gly Ile Ser Phe Ile Cys Lys Met Gln Arg Leu Val Leu
            35                 40                 45

Xaa Asn His Thr Asn Phe Phe Val Leu
       50                 55
```

<210> 426
<211> 99
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 426
```
Phe Gly Thr Ser Gly Asp Gly Gly Gly Ser Lys Met Ala Gln Ala Ile
 1               5                 10                 15

Phe Glu Ala Leu Glu Gly Met Asp Asn Gln Thr Val Leu Ala Val Gln
```

373

```
                   20                  25                  30

Ser Leu Leu Asp Gly Gln Gly Ala Val Pro Asp Pro Thr Gly Gln Ser
         35                  40                  45

Val Asn Ala Pro Pro Ala Ile Gln Pro Leu Asp Asp Glu Asp Val Phe
         50                  55                  60

Leu Cys Gly Lys Cys Lys Lys Gln Phe Asn Ser Leu Pro Ala Phe Met
 65                  70                  75                  80

Thr His Lys Arg Glu Gln Cys Gln Gly Asn Ala Pro Ala Leu Ala Xaa
                 85                  90                  95

Val Ser Leu



<210> 427
<211> 55
<212> PRT
<213> Homo sapiens

<400> 427
Asn Ser Asn Ser Ser Ile Phe Ser Leu Val Ser Val Lys Cys Asp Lys
  1               5                  10                  15

Ser Thr Tyr Phe Lys Leu Phe Ser Ala Leu Gly Tyr Ser Ser Asn Lys
             20                  25                  30

Asn Thr Asn Leu Trp Val Phe Lys Lys Thr Trp Arg Ile Asn Ser Tyr
         35                  40                  45

Phe Lys Arg Ser Lys Lys Lys
         50                  55



<210> 428
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 428
His Thr Leu Ser Asn Leu Glu Phe Ala Gln Lys Val Glu Pro Cys Asn
```

```
   1               5                    10                  15
Asp His Val Arg Ala Lys Leu Ser Trp Ala Lys Lys Arg Asp Glu Asp
            20                   25                  30
Asp Val Pro Thr Val Pro Ser Thr Xaa Gly Glu Glu Arg Leu Tyr Asn
            35                   40                  45
Pro Phe Leu Arg Val Ala
        50
```

<210> 429
<211> 39
<212> PRT
<213> Homo sapiens

<400> 429
```
Arg Gln Thr Lys Val Asn Leu Lys Glu Thr Arg Ser Phe Glu Ile Ile
   1               5                    10                  15
Val Trp Gly Phe Tyr Lys Ser Asn Tyr Cys His Leu His Pro Asp Ser
            20                   25                  30
Phe Lys Leu Leu Ile His Pro
            35
```

<210> 430
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 430
```
Ala Arg Ala Pro Arg Val Pro Pro Ala Pro His Thr Pro Ser Lys Met
   1               5                    10                  15
Gly Lys Glu Lys Thr His Ile Asn Ile Val Val Ile Gly His Val Asp
            20                   25                  30
```

```
Ser Gly Lys Ser Thr Thr Thr Gly His Leu Ile Tyr Lys Cys Gly Gly
        35                  40                  45

Ile Asp Lys Arg Thr Ile Glu Lys Phe Glu Lys Glu Ala Ala Glu Met
        50                  55                  60

Gly Lys Gly Ser Phe Lys Tyr Ala Trp Val Leu Asp Lys Leu Lys Ala
65                  70                  75                  80

Xaa Val Ser Ala Xaa Ile Thr Ile Asp Ile Ser Leu Trp Lys Phe Glu
                85                  90                  95

Thr Thr Lys Tyr Tyr Ile Thr Ile Ile Asp Ala Pro Gly His Arg Asp
                100                 105                 110

Phe Ile Lys Asn Met Ile Thr Gly Thr Ser Gln Ala Asp Cys Ala Val
        115                 120                 125

Leu Ile Val Ala Ala
        130
```

<210> 431
<211> 190
<212> PRT
<213> Homo sapiens

<400> 431
```
Leu Cys Trp Ala Arg Pro Leu Pro Ser Gly Pro Val Leu Leu Ala Ala
1               5                   10                  15

Asn Lys Asp Ser Ser Trp Cys Pro Thr Cys Leu Val His Cys Cys Val
        20                  25                  30

Asn Pro Gly Gly Ser Gly His Arg Arg Gln Pro Arg Pro Arg Val Gln
        35                  40                  45

Glu Lys Cys Ser Leu Glu Ala Arg Thr Thr Ala Ser His Trp Gly Arg
        50                  55                  60

Arg Gly Pro Arg Thr Thr Ser Ala Ser Tyr Leu Pro Ala Ser Ala Arg
65                  70                  75                  80

Gly Pro Arg Asp Ala Val Leu Phe Gln Pro Pro Ala Leu Gly Arg Gly
                85                  90                  95

His Ala Ser Arg Ile Gln Gly Ala Gly Gly Leu Ser Thr Ala Arg Thr
                100                 105                 110
```

```
Cys Leu Leu Ala Ala Ala Ala Val Gly Glu His Gly Gly Cys Gln Arg
        115             120             125

Leu Leu Trp Lys Val Ala Ala Ser Glu Met Ala Gly Ala Ala Gly Val
        130             135             140

Arg Leu His Thr Ala Gln Val Ser Ser Gly Arg Leu Ser Trp Gly Gly
145             150             155             160

Ser Ser Ser Ala Glu Gly Trp Trp Gly Val Gln Ser Val Ile Leu Gly
            165             170             175

Ala Val Cys Pro Thr Pro Ala Trp Gly Pro His Phe Arg Arg
            180             185             190
```

<210> 432
<211> 310
<212> PRT
<213> Homo sapiens

<400> 432
```
Gly Pro His Gly Asn Gly Glu Val Arg Trp Pro Leu Pro Pro Pro Pro
 1           5               10              15

Pro Arg Phe Val Ala Arg Arg Lys Met Ala Asp Leu Glu Glu Gln Leu
            20              25              30

Ser Asp Glu Glu Lys Val Arg Ile Ala Ala Lys Phe Ile Ile His Ala
            35              40              45

Pro Pro Gly Glu Phe Asn Glu Val Phe Asn Asp Val Arg Leu Leu Leu
    50              55              60

Asn Asn Asp Asn Leu Leu Arg Glu Gly Ala Ala His Ala Phe Ala Gln
65              70              75              80

Tyr Asn Leu Asp Gln Phe Thr Pro Val Lys Ile Glu Gly Tyr Glu Asp
            85              90              95

Gln Val Leu Ile Thr Glu His Gly Asp Leu Gly Asn Gly Lys Phe Leu
            100             105             110

Asp Pro Lys Asn Arg Ile Cys Phe Lys Phe Asp His Leu Arg Lys Glu
        115             120             125

Ala Thr Asp Pro Arg Pro Cys Glu Val Glu Asn Ala Val Glu Ser Trp
        130             135             140

Arg Thr Ser Val Glu Thr Ala Leu Arg Ala Tyr Val Lys Glu His Tyr
```

377

```
145              150              155              160

Pro Asn Gly Val Cys Thr Val Tyr Gly Lys Lys Ile Asp Gly Gln Gln
            165              170              175

Thr Ile Ile Ala Cys Ile Glu Ser His Gln Phe Gln Ala Lys Asn Phe
            180              185              190

Trp Asn Gly Arg Trp Arg Ser Glu Trp Lys Phe Thr Ile Thr Pro Ser
        195              200              205

Thr Thr Gln Val Val Gly Ile Leu Lys Ile Gln Val His Tyr Tyr Glu
    210              215              220

Asp Gly Asn Val Gln Leu Val Ser His Lys Asp Ile Gln Asp Ser Leu
225              230              235              240

Thr Val Ser Asn Glu Val Gln Thr Ala Lys Glu Phe Ile Lys Ile Val
            245              250              255

Glu Ala Ala Glu Asn Glu Tyr Gln Thr Ala Ile Ser Glu Asn Tyr Gln
            260              265              270

Thr Met Ser Asp Thr Thr Phe Lys Ala Leu Arg Arg Gln Leu Pro Val
        275              280              285

Thr Arg Thr Lys Ile Asp Trp Asn Lys Ile Leu Ser Tyr Lys Ile Gly
        290              295              300

Lys Glu Met Gln Asn Ala
305              310
```

<210> 433
<211> 289
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (288)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 433
Gln Ser Cys Thr Ser Gly Ser Ser Lys Pro Asn Ser Pro Ser Ile Ser

```
  1                  5                    10                    15

Pro Ser Ile Leu Ser Asn Thr Glu His Lys Arg Gly Pro Glu Val Thr
          20                  25                  30

Ser Gln Gly Val Gln Thr Ser Ser Pro Ala Cys Lys Gln Glu Lys Asp
          35                  40                  45

Asp Lys Glu Glu Lys Lys Asp Ala Ala Glu Gln Val Arg Lys Ser Thr
     50                  55                  60

Leu Asn Pro Asn Ala Lys Glu Phe Asn Pro Arg Ser Phe Ser Gln Pro
 65                  70                  75                  80

Lys Pro Ser Thr Thr Pro Thr Ser Pro Arg Pro Gln Ala Gln Pro Ser
               85                  90                  95

Pro Ser Met Val Gly His Gln Gln Pro Thr Pro Val Tyr Thr Gln Pro
              100                 105                 110

Val Cys Phe Ala Pro Asn Met Met Tyr Pro Val Pro Val Ser Pro Gly
          115                 120                 125

Val Gln Pro Leu Tyr Pro Ile Pro Met Thr Pro Met Pro Val Asn Gln
     130                 135                 140

Ala Lys Thr Tyr Arg Ala Gly Lys Val Pro Asn Met Pro Gln Gln Arg
145                 150                 155                 160

Gln Asp Gln His His Gln Ser Ala Met Met His Pro Ala Ser Ala Ala
              165                 170                 175

Gly Pro Pro Ile Ala Ala Thr Pro Pro Ala Tyr Ser Thr Gln Tyr Val
              180                 185                 190

Ala Tyr Ser Pro Gln Gln Phe Pro Asn Gln Pro Leu Val Gln His Val
          195                 200                 205

Pro His Tyr Gln Ser Gln His Pro His Val Tyr Ser Pro Val Ile Gln
     210                 215                 220

Gly Asn Ala Arg Met Met Ala Pro Pro Thr His Ala Gln Pro Gly Leu
225                 230                 235                 240

Val Ser Ser Ser Ala Thr Gln Tyr Gly Ala His Glu Gln Thr His Ala
              245                 250                 255

Met Tyr Ala Cys Pro Lys Leu Pro Tyr Asn Lys Glu Thr Ser Pro Ser
              260                 265                 270

Phe Tyr Phe Ala Ile Ser Thr Gly Ser Leu Ala Gln Gln Tyr Xaa Xaa
```

379

```
              275                280                285

Pro


<210> 434
<211> 147
<212> PRT
<213> Homo sapiens

<400> 434
Lys Val Thr Pro Asp Leu Lys Pro Thr Glu Ala Ser Ser Ser Ala Phe
 1               5                10               15

Arg Leu Met Pro Ala Leu Gly Val Ser Val Ala Asp Gln Lys Gly Lys
            20               25               30

Ser Thr Val Ala Ser Ser Glu Ala Lys Pro Ala Ala Thr Ile Arg Ile
         35               40               45

Val Gln Gly Leu Gly Val Met Pro Pro Lys Ala Gly Gln Thr Ile Thr
      50               55               60

Val Ala Thr His Ala Lys Gln Gly Ala Ser Val Ala Ser Gly Ser Gly
 65               70               75               80

Thr Val His Thr Ser Ala Val Ser Leu Pro Ser Met Asn Ala Ala Val
               85               90               95

Ser Lys Thr Val Ala Val Ala Ser Gly Ala Ala Arg Pro Pro Ser Ala
            100              105              110

Ser Ala Gln Glu Pro Pro Pro Cys Gly Arg Ser Leu Ser Ala Pro Arg
         115              120              125

Leu Cys Pro Arg Pro Arg Leu Gly Ser Cys Leu His Gly Ser Gln Phe
      130              135              140

Pro Ser Leu
145


<210> 435
<211> 151
<212> PRT
<213> Homo sapiens

<220>
```

380

```
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 435
Gly Ser Gly Thr Lys Asp Pro Ser Xaa Cys Asn Thr Gln Thr Xaa Ala
  1               5                  10                  15

His Thr His Thr Gly Gly Glu Ile Ser Leu Phe Ser Met Ser Phe Phe
             20                  25                  30

Ser Trp Ala Glu Thr Gly Tyr Cys Pro Gly Gln Leu Pro Glu Lys His
         35                  40                  45

Arg Arg Glu Leu Arg Ser Ala Arg Pro Ser Ser Leu Ala Pro Gly Phe
     50                  55                  60

Gly Gly Pro Arg Thr Ala Asp Arg Gly Trp Ser Trp Arg Leu Xaa Ser
 65                  70                  75                  80

Arg Ala Tyr Thr Trp Arg Asn Ala Pro Pro Ser Ser Pro Ser Leu Gln
             85                  90                  95

Thr Trp Gly Trp Leu Gly Pro Glu Gly Cys Asp Glu Glu Lys Arg Ala
             100                 105                 110

Ser Val Gly Met Arg Gln Glu Gly Ile Asp Phe Asp Cys Asp Leu Trp
         115                 120                 125

Gly Phe Leu Pro Ala Leu Asp Asn Pro Ala Lys Asp Cys Phe Phe Leu
     130             .   135                 140

Ser Leu Ala Arg Arg Gly Pro
145                 150


<210> 436
<211> 180
<212> PRT
<213> Homo sapiens
```

381

```
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 436
Ala Pro Ala Ser Pro Val Met Pro Pro Gln Thr Gln Ser Pro Gly Gln
 1               5                  10                  15


Pro Ala Gln Pro Ala Pro Met Val Pro Leu His Gln Lys Gln Ser Arg
            20              25                  30


Ile Thr Pro Ile Gln Lys Pro Arg Gly Xaa Asp Pro Val Glu Ile Leu
            35                  40                  45


Gln Glu Arg Glu Tyr Arg Leu Gln Ala Arg Ile Ala His Arg Ile Gln
    50                  55                  60


Glu Leu Glu Asn Leu Pro Gly Ser Leu Ala Gly Asp Leu Arg Thr Lys
65                  70                  75                  80


Ala Thr Ile Glu Leu Lys Ala Leu Arg Leu Leu Asn Phe Gln Arg Gln
                85                  90                  95


Leu Arg Gln Glu Val Val Val Cys Met Arg Arg Asp Thr Ala Leu Glu
            100                 105                 110


Thr Ala Leu Asn Ala Lys Ala Tyr Lys Arg Xaa Ser Ala Ser Pro Cys
        115                 120                 125


Ala Arg Pro Ala Ser Leu Arg Ser Trp Arg Ser Ser Arg Arg Ser Ser
    130                 135                 140


Arg Ser Ala Ser Ala Gly Arg Ser Thr Arg Asn Thr Ser Ile Ala Phe
145                 150                 155                 160


Ser Ser Met Pro Arg Ile Ser Arg Asn Ile Thr Asp Pro Ser Gln Ala
                165                 170                 175


Lys Ser Arg Ser
            180



<210> 437
```

```
<211> 415
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 437
Arg Lys Tyr Leu Val Pro Leu Xaa Lys Lys Leu Tyr Leu Lys Trp Ala
 1               5                  10                  15

Leu Glu Glu Tyr Leu Asp Glu Phe Asp Pro Cys His Cys Arg Pro Cys
             20                  25                  30

Gln Asn Gly Gly Leu Ala Thr Val Glu Gly Thr His Cys Leu Cys His
         35                  40                  45

Cys Lys Pro Tyr Thr Phe Gly Ala Ala Cys Glu Gln Gly Val Leu Val
     50                  55                  60

Gly Asn Gln Ala Gly Gly Val Asp Gly Gly Trp Ser Cys Trp Ser Ser
 65                  70                  75                  80

Trp Ser Pro Cys Val Gln Gly Lys Lys Thr Arg Ser Arg Xaa Cys Xaa
                 85                  90                  95

Asn Pro Pro Pro Ser Gly Gly Gly Arg Ser Cys Val Gly Glu Thr Thr
             100                 105                 110

Glu Ser Thr Gln Cys Glu Asp Glu Glu Leu Glu His Leu Arg Leu Leu
         115                 120                 125

Glu Pro His Cys Phe Pro Leu Ser Leu Val Pro Thr Glu Phe Cys Pro
     130                 135                 140
```

```
Ser Pro Pro Ala Leu Lys Asp Gly Phe Val Gln Asp Glu Gly Thr Met
145             150             155             160

Phe Pro Val Gly Lys Asn Val Val Tyr Xaa Cys Asn Glu Gly Tyr Ser
                165             170             175

Leu Ile Gly Asn Pro Val Ala Arg Cys Gly Glu Asp Leu Arg Trp Leu
            180             185             190

Val Gly Glu Met His Cys Gln Lys Ile Ala Cys Val Leu Pro Val Leu
        195             200             205

Met Asp Gly Ile Gln Ser His Pro Gln Lys Pro Phe Tyr Thr Val Gly
    210             215             220

Glu Lys Val Thr Val Ser Cys Ser Gly Gly Met Ser Leu Glu Gly Pro
225             230             235             240

Ser Ala Phe Leu Cys Gly Ser Ser Leu Lys Trp Ser Pro Glu Met Lys
            245             250             255

Asn Ala Arg Cys Val Gln Lys Glu Asn Pro Leu Thr Gln Ala Val Pro
            260             265             270

Lys Cys Gln Arg Trp Glu Lys Leu Gln Asn Ser Arg Cys Val Cys Lys
        275             280             285

Met Pro Tyr Glu Cys Gly Pro Ser Leu Asp Val Cys Ala Gln Asp Glu
    290             295             300

Arg Ser Lys Arg Ile Leu Pro Leu Thr Val Cys Lys Met His Val Leu
305             310             315             320

His Cys Gln Gly Arg Asn Tyr Thr Leu Thr Gly Arg Asp Ser Cys Thr
            325             330             335

Leu Pro Ala Ser Ala Glu Lys Ala Cys Gly Ala Cys Pro Leu Trp Gly
            340             345             350

Lys Cys Asp Ala Glu Ser Ser Lys Cys Val Cys Arg Glu Ala Ser Glu
        355             360             365

Cys Glu Glu Glu Gly Phe Ser Ile Cys Val Glu Val Asn Gly Lys Glu
    370             375             380

Gln Thr Met Ser Glu Cys Glu Ala Gly Ala Leu Arg Cys Arg Gly Gln
385             390             395             400

Ser Ile Ser Val Thr Ser Ile Arg Pro Cys Ala Ala Glu Thr Gln
            405             410             415
```

```
<210> 438
<211> 285
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 438
Leu Ile Arg Leu Thr Ile Gly Lys Ala Gly Ser Leu Gln Tyr Arg Xaa
 1               5                  10                  15


Xaa Xaa Phe Pro Gly Met Glu Ala Phe Leu Gly Ser Arg Ser Gly Leu
            20                  25                  30


Trp Ala Gly Gly Pro Ala Pro Gly Gln Phe Tyr Arg Ile Pro Ser Thr
        35                  40                  45


Pro Asp Ser Phe Met Asp Pro Ala Ser Ala Leu Tyr Arg Gly Pro Ile
    50                  55                  60


Thr Arg Thr Gln Asn Pro Met Val Thr Gly Thr Ser Val Leu Gly Val
65                  70                  75                  80


Lys Phe Glu Gly Gly Val Val Ile Ala Ala Asp Met Leu Gly Ser Tyr
                85                  90                  95


Gly Ser Leu Ala Arg Phe Arg Asn Ile Ser Arg Ile Met Arg Val Asn
            100                 105                 110


Asn Ser Thr Met Leu Gly Ala Ser Gly Asp Tyr Ala Asp Phe Gln Tyr
            115                 120                 125


Leu Lys Gln Val Leu Gly Gln Met Val Ile Asp Glu Glu Leu Leu Gly
        130                 135                 140
```

```
Asp Gly His Ser Tyr Ser Pro Arg Ala Ile His Ser Trp Leu Thr Arg
145             150             155             160

Ala Met Tyr Ser Arg Arg Ser Lys Met Asn Pro Leu Trp Asn Thr Met
                165             170             175

Val Ile Gly Gly Tyr Ala Asp Gly Glu Ser Phe Leu Gly Tyr Val Asp
            180             185             190

Met Leu Gly Val Ala Tyr Glu Ala Pro Ser Leu Ala Thr Gly Tyr Gly
            195             200             205

Ala Tyr Leu Ala Gln Pro Leu Leu Arg Glu Val Leu Glu Lys Gln Pro
    210             215             220

Val Leu Ser Gln Thr Glu Ala Arg Asp Leu Val Glu Arg Cys Met Arg
225             230             235             240

Val Leu Tyr Tyr Arg Asp Ala Arg Ser Tyr Asn Arg Phe Gln Ile Ala
            245             250             255

Thr Val Thr Glu Lys Gly Val Glu Ile Glu Gly Pro Leu Ser Thr Glu
            260             265             270

Thr Asn Trp Asp Ile Ala His Met Ile Ser Gly Phe Glu
            275             280             285


<210> 439
<211> 185
<212> PRT
<213> Homo sapiens

<400> 439
Asn Ser Ala Ala His Lys Lys Gly Lys Leu Pro Ile Val Asn Glu Asp
  1             5             10             15

Asp Glu Leu Val Ala Ile Ile Ala Arg Thr Asp Leu Lys Lys Asn Arg
            20             25             30

Asp Tyr Pro Leu Ala Ser Lys Asp Ala Lys Lys Gln Leu Leu Cys Gly
            35             40             45

Ala Ala Ile Gly Thr His Glu Asp Asp Lys Tyr Arg Leu Asp Leu Leu
    50             55             60

Ala Gln Ala Gly Val Asp Val Val Val Leu Asp Ser Ser Gln Gly Asn
65             70             75             80

Ser Ile Phe Gln Ile Asn Met Ile Lys Tyr Ile Lys Asp Lys Tyr Pro
```

<pre>
                    85   90   95

        Asn Leu Gln Val Ile Gly Gly Asn Val Val Thr Ala Ala Gln Ala Lys
                    100   105   110

        Asn Leu Ile Asp Ala Gly Val Asp Ala Leu Arg Val Gly Met Gly Ser
                115   120   125

        Gly Ser Ile Cys Ile Thr Gln Glu Val Leu Ala Cys Gly Arg Pro Gln
                130   135   140

        Ala Thr Ala Val Tyr Lys Val Ser Glu Tyr Ala Arg Arg Phe Gly Val
        145   150   155   160

        Pro Val Ile Ala Asp Gly Gly Ile Gln Asn Val Gly His Ile Ala Lys
                        165   170   175

        Ala Leu Ala Leu Gly Ala Pro Gln Ser
                    180   185
</pre>

<pre>
<210> 440
<211> 211
<212> PRT
<213> Homo sapiens

<400> 440
Leu Gln Gly Arg Ser Thr Pro Ile Trp Pro Ala Leu Ala Thr Val Thr
  1   5   10   15

Ser Arg Thr Pro Ala Leu Gly Pro Gln Ala Gly Ile Asp Thr Asn Glu
                20   25   30

Ile Ala Pro Leu Glu Pro Asp Ala Pro Asp Ala Cys Glu Ala Ser
                35   40   45

Phe Asp Ala Val Ser Thr Ile Arg Gly Glu Leu Phe Phe Phe Lys Ala
        50   55   60

Gly Phe Val Trp Arg Leu Arg Gly Gly Gln Leu Gln Pro Gly Tyr Pro
65   70   75   80

Ala Leu Ala Ser Arg His Trp Gln Gly Leu Pro Ser Pro Val Asp Ala
                85   90   95

Ala Phe Glu Asp Ala Gln Gly His Ile Trp Phe Phe Gln Gly Ala Gln
                100   105   110

Tyr Trp Val Tyr Asp Gly Glu Lys Pro Val Leu Gly Pro Ala Pro Leu
        115   120   125
</pre>

```
Thr Glu Leu Gly Leu Val Arg Phe Pro Val His Ala Ala Leu Val Trp
    130             135             140
```

```
Gly Pro Glu Lys Asn Lys Ile Tyr Phe Phe Arg Gly Arg Asp Tyr Trp
145             150             155             160
```

```
Arg Phe His Pro Ser Thr Arg Arg Val Asp Ser Pro Val Pro Arg Arg
            165             170             175
```

```
Pro Leu Thr Gly Glu Gly Cys Pro Leu Arg Ser Thr Leu Pro Ser Arg
            180             185             190
```

```
Met Leu Met Ala Met Pro Thr Ser Cys Ala Ala Ala Ser Thr Gly Ser
        195             200             205
```

```
Leu Thr Leu
    210
```

●

```
<210> 441
<211> 80
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 441
Gly Gly Ala Gly Lys Leu Leu Ser Phe Thr His Ser Ala Pro Trp Ser
  1           5               10              15
```

```
Arg Leu Trp Ser Ser Leu Gly Lys Arg Val Thr Gly Glu Ser Gln Gly
            20              25              30
```

```
Leu Glu Lys Leu Pro Gly Thr Xaa Asp Gly Leu Ala Ala Leu Thr Gln
        35              40  .           45
```

```
Asp Pro Leu Pro Leu Pro Pro Pro Leu Cys Arg Asn Thr Gly Thr Pro
    50              55              60
```

```
Arg Gly Lys Met Ser Phe Ser Arg Leu Gln Phe Ser Pro Arg Lys Leu
65              70              75              80
```

```
<210> 442
<211> 567
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (469)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (503)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (505)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (517)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (535)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (546)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 442
Asn Val His Leu Tyr Ile Met Tyr Tyr Met Glu Ala Lys His Ala Val
 1               5                  10                  15

Ser Phe Met Thr Cys Thr Gln Asn Val Ala Pro Asp Met Phe Arg Thr
```

```
                   20                      25                      30

        Ile Pro Pro Glu Ala Asn Ile Pro Ile Pro Val Lys Ser Asp Met Val
                35                      40                      45

        Met Met His Glu His His Lys Glu Thr Glu Tyr Lys Asp Lys Ile Pro
                50                      55                      60

        Leu Leu Gln Gln Pro Lys Arg Glu Glu Glu Val Leu Asp Gln Gly
        65                      70                      75              80

        Asp Phe Tyr Ser Leu Leu Ser Lys Leu Leu Gly Glu Arg Glu Asp Val
                        85                      90                      95

        Val His Val His Lys Tyr Asn Pro Thr Glu Lys Ala Glu Ser Glu Ser
                    100                     105                     110

        Asp Leu Val Ala Glu Ile Ala Asn Val Val Gln Lys Lys Asp Leu Gly
                115                     120                     125

        Arg Ser Asp Ala Arg Glu Gly Ala Glu His Glu Arg Gly Asn Ala Ile
                130                     135                     140

        Leu Val Arg Asp Arg Ile His Lys Phe His Arg Leu Val Ser Thr Leu
        145                     150                     155             160

        Arg Pro Pro Glu Ser Arg Val Phe Ser Leu Gln Gln Pro Pro Gly
                        165                     170                     175

        Glu Gly Thr Trp Glu Pro Glu His Thr Gly Asp Phe His Met Glu Glu
                    180                     185                     190

        Ala Leu Asp Trp Pro Gly Val Tyr Leu Leu Pro Gly Xaa Val Ser Gly
                195                     200                     205

        Val Ala Leu Xaa Pro Lys Asn Asn Leu Val Ile Phe His Arg Gly Asp
                210                     215                     220

        His Val Trp Asp Gly Asn Ser Phe Asp Ser Lys Phe Val Tyr Gln Gln
        225                     230                     235             240

        Ile Gly Leu Gly Pro Ile Glu Glu Asp Thr Ile Leu Val Ile Asp Pro
                        245                     250                     255

        Asn Asn Ala Ala Val Leu Gln Ser Ser Gly Lys Asn Leu Phe Tyr Leu
                260                     265                     270

        Pro His Gly Leu Ser Ile Asp Lys Asp Gly Asn Tyr Trp Val Thr Asp
                275                     280                     285

        Val Ala Leu His Gln Val Phe Lys Leu Asp Pro Asn Asn Lys Glu Gly
```

```
          290                   295                   300

Pro Val Leu Ile Leu Gly Arg Ser Met Gln Pro Gly Ser Asp Gln Asn
305                 310                 315                 320

His Phe Cys Gln Pro Thr Asp Val Ala Val Asp Pro Gly Thr Gly Ala
                325                 330                 335

Ile Tyr Val Ser Asp Gly Tyr Cys Asn Ser Arg Ile Val Gln Phe Ser
                340                 345                 350

Pro Ser Gly Lys Phe Ile Thr Gln Trp Gly Glu Glu Ser Ser Gly Ser
                355                 360                 365

Ser Pro Leu Pro Gly Gln Phe Thr Val Pro His Ser Leu Ala Leu Val
    370                 375                 380

Pro Leu Leu Gly Gln Leu Cys Val Ala Asp Arg Glu Asn Gly Arg Ile
385                 390                 395                 400

Gln Cys Phe Lys Thr Asp Thr Lys Glu Phe Val Arg Glu Ile Lys His
                405                 410                 415

Ser Ser Phe Gly Arg Asn Val Phe Ala Ile Ser Tyr Ile Pro Gly Leu
                420                 425                 430

Leu Phe Ala Val Asn Gly Lys Pro His Phe Gly Asp Gln Glu Pro Val
        435                 440                 445

Gln Gly Phe Val Met Asn Phe Ser Asn Gly Glu Ile Ile Asp Ile Phe
        450                 455                 460

Lys Pro Val Arg Xaa Leu Leu Asp Met Pro His Asp Ile Val Ala Ser
465                 470                 475                 480

Glu Asp Gly Thr Val Tyr Ile Gly Arg Cys Ser Tyr Gln His Arg Val
                485                 490                 495

Gly Ser Ser Thr Leu Asp Xaa Arg Xaa Leu Gly Thr Ser Val Gln Phe
                500                 505                 510

Lys Lys Gly Leu Xaa Ile Glu Val Gln Gly Asn Pro Lys Lys Pro Glu
        515                 520                 525

Gly Ile Cys Cys Phe Pro Xaa Thr Thr Leu Arg Val Ile Pro Val Val
        530                 535                 540

Gly Xaa Trp Arg Gly His Gly Pro Asn Leu Ile Pro Val Gly Lys Asn
545                 550                 555                 560

Pro Arg Gly Pro Leu Gly Arg
```

391

565

<210> 443
<211> 129
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 443
Arg Pro Ser Cys Ser Pro Gly Ser Val Ser Ala Ala Ala Val Asn Met
 1   5   10   15

Glu Pro Pro Asp Ala Pro Ala Gln Ala Arg Gly Ala Pro Arg Leu Leu
            20   25   30

Leu Leu Ala Val Leu Leu Ala Ala His Pro Asp Ala Gln Ala Glu Val
         35   40   45

Arg Leu Ser Val Pro Pro Leu Val Glu Val Met Arg Gly Lys Ser Val
     50   55   60

Ile Leu Asp Cys Thr Pro Thr Gly Thr His Asp His Tyr Met Leu Glu
 65   70   75   80

Trp Phe Leu Thr Asp Arg Ser Gly Ala Arg Pro Arg Leu Ala Ser Ala
                85   90   95

Glu Met Gln Gly Ser Glu Leu Gln Val Thr Met His Asp Thr Arg Gly
            100   105   110

Arg Ser Pro Pro Tyr Gln Leu Gly Leu Pro Xaa Gly Ala Trp Xaa Leu
         115   120   125

Xaa

<210> 444
<211> 131
<212> PRT
<213> Homo sapiens

<400> 444
Glu Pro Arg Val Glu Arg Glu Thr Pro Gly Gln Pro Phe Ser Ser Ser
 1   5   10   15

Phe Pro Ser Pro Ser Pro Phe Pro Asn Val Ala Ser Met Trp Val Leu
            20   25   30

Gly Thr Trp Glu Lys Pro Leu Leu Cys His Phe Phe Ser Leu Phe Pro
        35   40   45

Ser Ser Pro Pro Thr Val Trp Leu Met Met Ser Ser Gly Val Met Val
        50   55   60

Thr Thr Pro Cys Ser Leu Phe Trp Tyr Phe Pro Cys Gln Phe Pro Leu
65   70   75   80

Ser Ala Arg Leu Cys Pro Lys Ile Pro Ser Ala Ser Ser Leu His Val
                85   90   95

Ala Glu Gly Pro Gly Leu Pro Gln Val Pro Cys Leu Ser Asn Lys Val
            100   105   110

Glu Thr Ile Lys Pro Gly Lys Lys Lys Gly Gly Arg Ser Lys Gly
        115   120   125

Ser Pro Arg
    130

<210> 445
<211> 405
<212> PRT
<213> Homo sapiens

<400> 445
Gly Thr Gly Leu Val Pro Ile Arg Gln Ser Thr Lys Phe Asp Ser Ser
 1   5   10   15

Leu Asp Arg Lys Asp Lys Phe Ser Phe Asp Leu Gly Lys Gly Glu Val
            20   25   30

Ile Lys Ala Trp Asp Ile Ala Ile Ala Thr Met Lys Val Gly Glu Val

393

```
              35                    40                    45

Cys His Ile Thr Cys Lys Pro Glu Tyr Ala Tyr Gly Ser Ala Gly Ser
     50                    55                    60

Pro Pro Lys Ile Pro Pro Asn Ala Thr Leu Val Phe Glu Val Glu Leu
65                    70                    75                    80

Phe Glu Phe Lys Gly Glu Asp Leu Thr Glu Glu Glu Asp Gly Gly Ile
               85                    90                    95

Ile Arg Arg Ile Gln Thr Arg Gly Glu Gly Tyr Ala Lys Pro Asn Glu
               100                   105                   110

Gly Ala Ile Val Glu Val Ala Leu Glu Gly Tyr Tyr Lys Asp Lys Leu
               115                   120                   125

Phe Asp Gln Arg Glu Leu Arg Phe Glu Ile Gly Glu Gly Glu Asn Leu
       130                   135                   140

Asp Leu Pro Tyr Gly Leu Glu Arg Ala Ile Gln Arg Met Glu Lys Gly
145                   150                   155                   160

Glu His Ser Ile Val Tyr Leu Lys Pro Ser Tyr Ala Phe Gly Ser Val
               165                   170                   175

Gly Lys Glu Lys Phe Gln Ile Pro Pro Asn Ala Glu Leu Lys Tyr Glu
               180                   185                   190

Leu His Leu Lys Ser Phe Glu Lys Ala Lys Glu Ser Trp Glu Met Asn
       195                   200                   205

Ser Glu Glu Lys Leu Glu Gln Ser Thr Ile Val Lys Glu Arg Gly Thr
   210                   215                   220

Val Tyr Phe Lys Glu Gly Lys Tyr Lys Gln Ala Leu Leu Gln Tyr Lys
225                   230                   235                   240

Lys Ile Val Ser Trp Leu Glu Tyr Glu Ser Ser Phe Ser Asn Glu Glu
               245                   250                   255

Ala Gln Lys Ala Gln Ala Leu Arg Leu Ala Ser His Leu Asn Leu Ala
       260                   265                   270

Met Cys His Leu Lys Leu Gln Ala Phe Ser Ala Ala Ile Glu Ser Cys
       275                   280                   285

Asn Lys Ala Leu Glu Leu Asp Ser Asn Asn Glu Lys Gly Leu Phe Arg
       290                   295                   300

Arg Gly Glu Ala His Leu Ala Val Asn Asp Phe Glu Leu Ala Arg Ala
```

394

```
305                  310                  315                  320

Asp Phe Gln Lys Val Leu Gln Leu Tyr Pro Asn Asn Lys Ala Ala Lys
            325                  330                  335

Thr Gln Leu Ala Val Cys Gln Gln Arg Ile Arg Arg Gln Leu Ala Arg
            340                  345                  350

Glu Lys Lys Leu Tyr Ala Asn Met Phe Glu Arg Leu Ala Glu Glu Glu
        355                  360                  365

Asn Lys Ala Lys Ala Glu Ala Ser Ser Gly Asp His Pro Thr Asp Thr
    370                  375                  380

Glu Met Lys Glu Glu Gln Lys Ser Asn Thr Ala Gly Ser Gln Ser Gln
385                  390                  395                  400

Val Glu Thr Glu Ala
            405
```

```
<210> 446
<211> 232
<212> PRT
<213> Homo sapiens

<400> 446
Pro Leu Val Pro Ser Ser Gln Lys Ala Leu Leu Leu Glu Leu Lys Gly
  1             5                  10                  15

Leu Gln Glu Glu Pro Val Glu Gly Phe Arg Val Thr Leu Val Asp Glu
            20                  25                  30

Gly Asp Leu Tyr Asn Trp Glu Val Ala Ile Phe Gly Pro Pro Asn Thr
            35                  40                  45

Tyr Tyr Glu Gly Gly Tyr Phe Lys Ala Arg Leu Lys Phe Pro Ile Asp
        50                  55                  60

Tyr Pro Tyr Ser Pro Pro Ala Phe Arg Phe Leu Thr Lys Met Trp His
65                  70                  75                  80

Pro Asn Ile Tyr Glu Thr Gly Asp Val Cys Ile Ser Ile Leu His Pro
            85                  90                  95

Pro Val Asp Asp Pro Gln Ser Gly Glu Leu Pro Ser Glu Arg Trp Asn
            100                 105                 110

Pro Thr Gln Asn Val Arg Thr Ile Leu Leu Ser Val Ile Ser Leu Leu
        115                 120                 125
```

```
Asn Glu Pro Asn Thr Phe Ser Pro Ala Asn Val Asp Ala Ser Val Met
    130                 135             140

Tyr Arg Lys Trp Lys Glu Ser Lys Gly Lys Asp Arg Glu Tyr Thr Asp
145                 150             155                 160

Ile Ile Arg Lys Gln Val Leu Gly Thr Arg Trp Thr Arg Val Asn Gly
                165             170             175

Val Lys Val Pro Thr Thr Leu Ala Glu Tyr Cys Val Lys Thr Lys Ala
                180             185             190

Pro Ala Pro Asp Glu Gly Ser Asp Leu Phe Tyr Asp Asp Tyr Tyr Glu
            195             200             205

Asp Gly Glu Val Glu Glu Glu Ala Asp Ser Cys Phe Gly Asp Asp Glu
    210                 215             220

Asp Asp Ser Gly Thr Glu Glu Ser
225                 230


<210> 447
<211> 356
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 447
Cys Ser Pro Pro Pro Pro Pro Ala Ala Ala Ala Xaa Ala Ala Ala Ala
```

```
  1                    5                    10                   15

Ala Met Ala Gln Tyr Lys Gly Ala Ala Ser Glu Ala Gly Arg Ala Met
            20                   25                   30

His Leu Met Lys Lys Arg Glu Lys Gln Arg Glu Gln Met Glu Gln Met
            35                   40                   45

Lys Gln Arg Ile Xaa Glu Glu Asn Ile Met Lys Ser Asn Ile Asp Lys
        50                   55                   60

Lys Phe Ser Ala His Tyr Asp Ala Val Glu Ala Glu Leu Lys Ser Ser
65                   70                   75                   80

Thr Val Gly Leu Val Thr Leu Asn Asp Met Lys Ala Lys Gln Glu Ala
                85                   90                   95

Leu Val Lys Glu Arg Glu Lys Gln Leu Ala Lys Lys Glu Gln Ser Lys
            100                  105                  110

Glu Leu Gln Met Lys Leu Glu Lys Leu Arg Glu Lys Glu Arg Lys Lys
            115                  120                  125

Glu Ala Lys Arg Lys Ile Ser Ser Leu Ser Phe Thr Leu Glu Glu Glu
        130                  135                  140

Glu Glu Gly Gly Glu Glu Glu Glu Glu Ala Ala Met Tyr Glu Glu Glu
145                  150                  155                  160

Met Glu Arg Glu Glu Ile Thr Thr Lys Lys Arg Lys Leu Gly Lys Asn
            165                  170                  175

Pro Asp Val Asp Thr Ser Phe Leu Pro Asp Arg Asp Arg Glu Xaa Glu
            180                  185                  190

Glu Asn Arg Leu Arg Glu Glu Leu Arg Gln Glu Trp Glu Ala Lys Gln
            195                  200                  205

Glu Lys Ile Lys Ser Glu Glu Ile Glu Ile Thr Phe Ser Tyr Trp Asp
        210                  215                  220

Gly Ser Gly His Arg Arg Thr Val Lys Met Arg Lys Gly Asn Thr Met
225                  230                  235                  240

Gln Gln Phe Leu Gln Lys Ala Leu Glu Ile Leu Arg Lys Asp Phe Ser
                245                  250                  255

Glu Leu Arg Ser Ala Gly Xaa Glu Gln Leu Met Tyr Ile Lys Glu Asp
            260                  265                  270

Leu Ile Ile Pro His His His Ser Phe Tyr Asp Phe Ile Val Thr Lys
```

```
              275                 280                 285

Ala Arg Gly Lys Ser Gly Pro Leu Phe Asn Phe Asp Val His Asp Asp
    290                 295                 300

Val Arg Leu Leu Ser Asp Ala Thr Val Glu Lys Asp Glu Ser His Ala
305                 310                 315                 320

Gly Lys Val Val Leu Arg Ser Trp Tyr Glu Lys Asn Lys His Ile Phe
                325                 330                 335

Pro Ala Ser Arg Trp Glu Pro Tyr Asp Pro Glu Lys Lys Trp Asp Lys
                340                 345                 350

Tyr Thr Ile Arg
        355
```

<210> 448
<211> 88
<212> PRT
<213> Homo sapiens

<400> 448
```
Lys Thr His Lys Met Cys Asp Ala Phe Val Gly Thr Trp Lys Leu Val
 1               5                  10                  15

Ser Ser Glu Asn Phe Asp Asp Tyr Met Lys Glu Val Gly Val Gly Phe
                20                  25                  30

Ala Thr Arg Lys Val Ala Gly Met Ala Lys Pro Asn Met Ile Ile Ser
        35                  40                  45

Val Asn Gly Asp Val Ile Thr Ile Lys Ser Glu Ser Thr Phe Lys Asn
    50                  55                  60

Thr Glu Ile Ser Phe Ile Leu Gly Gln Glu Phe Asp Glu Ala Leu Gln
65                  70                  75                  80

Met Thr Gly Lys Ser Arg Ala Pro
                85
```

<210> 449
<211> 171
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 449
Leu Ile Leu Val Leu Met Phe Val Val Trp Met Lys Arg Arg Asp Lys
 1               5                   10                  15

Glu Arg Gln Ala Lys Gln Leu Leu Ile Asp Pro Glu Asp Asp Val Arg
                20                  25                  30

Asp Asn Ile Leu Lys Tyr Asp Glu Glu Gly Gly Gly Glu Glu Asp Gln
            35                  40                  45

Asp Tyr Asp Leu Ser Gln Leu Gln Gln Pro Asp Thr Val Glu Pro Asp
        50                  55                  60

Ala Ile Lys Pro Val Gly Ile Xaa Arg Met Asp Glu Arg Pro Ile His
65                  70                  75                  80

Ala Glu Pro Gln Tyr Pro Val Arg Ser Ala Ala Pro His Pro Gly Asp
                85                  90                  95

Ile Gly Asp Phe Ile Asn Glu Gly Leu Lys Ala Ala Asp Asn Asp Pro
                100                 105                 110

Thr Ala Pro Pro Tyr Asp Ser Leu Leu Val Phe Asp Tyr Glu Gly Ser
        115                 120                 125

Gly Ser Thr Xaa Gly Ser Leu Ser Ser Leu Asn Ser Ser Ser Ser Gly
    130                 135                 140

Gly Glu Gln Asp Tyr Asp Tyr Leu Asn Asp Trp Gly Pro Arg Phe Lys
145                 150                 155                 160

Lys Leu Ala Asp Met Tyr Gly Gly Gly Asp Asp
                165                 170


<210> 450
<211> 34
<212> PRT
<213> Homo sapiens

<400> 450
```

```
Lys Val Lys Ala Cys Cys Lys Asp Ile Phe Phe Leu Leu Leu Glu Gly
 1               5               10              15

Asn Thr Lys Arg Lys Ile Ser Phe Phe His Gly Ala Phe Asp Asn Phe
             20              25              30

Ser Leu
```

```
<210> 451
<211> 148
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 451
Arg Thr Leu His Pro Ala Thr Gly Pro Arg Ala Arg Pro Pro Arg Gly
 1               5               10              15

Trp Arg Arg Arg Leu Cys Ala Gln Gly Pro Ala Pro Asp Trp Asp Pro
             20              25              30

Gly Val Pro Pro Gly Leu Ala Ser Cys Gly Xaa Thr Val Trp Leu His
             35              40              45

Phe Ser Asp Pro Ser Leu Gly Arg Lys Val Lys Glu Thr Gly Pro Ala
     50              55              60

Ser Ala Phe Gly Leu Trp Phe Leu Asp Arg Val Leu Ser Pro Ser Pro
 65              70              75              80

Pro Ser Ser Pro Asn Leu Ser His Xaa Arg Pro Leu Pro Ala Ala Pro
             85              90              95

Ser Leu Leu Gly Ile Gly Ser Pro Glu Pro Pro Ser Pro Glu Pro Pro
             100             105             110

Thr Pro Leu Pro Gly Pro Cys Gly Cys Trp Ala Ser His Leu Lys Glu
         115             120             125
```

400

```
Gly Lys Val Val Gln Pro Glu Pro Val Glu Gln Cys Pro Val Trp Pro
    130             135             140

Pro Lys Pro Lys
145
```

```
<210> 452
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 452
Asp Ser His Arg Pro Arg Ala Met Arg Ala Leu Trp Val Leu Gly Leu
  1           5               10              15

Ser Cys Xaa Leu Leu Thr Phe Gly Ser Val Arg Xaa Asp Asp Glu Val
            20              25              30

Asp Val Asp Gly Thr Val Glu Glu Asp Leu Gly Lys Ser Arg Glu Gly
        35              40              45

Ser Arg Thr Asp Asp Glu Val Val Gln Arg Glu Glu Glu Ala Ile Xaa
    50              55              60
```

```
Val Gly Trp Ile Lys Cys Ile Pro Asn Lys Arg Thr Xaa Glu Xaa Lys
 65             70              75              80

Ser Arg Lys
```

```
<210> 453
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 453
Gly Trp Leu Pro Cys Gly Ser Ser Val Val Pro Ala Thr Pro Gly Ser
  1           5               10              15

Pro Pro Ser Arg Phe Trp Leu Leu Pro Ala Met Ala Leu Arg Val Leu
             20              25              30

Leu Leu Thr Ala Leu Thr Leu Cys His Gly Phe Asn Leu Asp Thr Glu
         35              40              45

Asn Ala Met Thr Phe Gln Glu Asn Ala Arg Gly Phe Gly Gln Ser Val
     50              55              60

Val Gln Leu Gln Gly Ser Arg Val Val Val Gly Ala Pro Gln Glu Ile
 65             70              75              80

Val Ala Ala Asn Gln Arg Gly Ser Leu Tyr Gln Cys Asp Tyr Ser Thr
             85              90              95

Gly Ser Cys Glu Pro Ile His Leu Gln Val Pro Val Glu Ala Val Asn
            100             105             110

Met Ser Leu Gly Leu Ser Leu Ala Ala Thr Thr Ser Pro Pro Gln Leu
            115             120             125

Leu Ala Cys Gly Pro Thr Val His Gln Thr Cys Ser Glu Asn Thr Tyr
            130             135             140

Val Lys Gly Leu Cys Phe Leu Phe Gly Ser Asn Leu Arg Gln Gln Pro
145             150             155             160

Gln Lys Phe Pro Glu Ala Leu Arg Gly Cys Pro Gln Glu Asp Ser Asp
                165             170             175
```

```
Ile Ala Phe Leu Ile Asp Gly Ser Gly Ser Ile Ile Pro His Asp Phe
            180             185             190

Arg Arg Met Lys Glu Phe Val Ser Thr Val Met Glu Gln Leu Lys Lys
            195             200             205

Ser Lys Thr Leu Phe Ser Leu Met Gln Tyr Ser Glu Glu Phe Arg Ile
    210             215             220

His Phe Thr Ser Lys Ser Ser Arg Thr Xaa Leu Thr Gln Asp His Trp
225             230             235             240
```

```
<210> 454
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (206)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (227)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (239)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 454
Lys Trp Cys Ser Trp Thr Leu Leu Lys Ile Trp Glu Val Thr Cys Thr
  1             5               10              15

Trp Lys Leu Pro Thr Leu Ala Lys Phe Ser Pro Tyr Leu Gly Gln Met
            20              25              30

Ile Asn Leu Arg Arg Leu Leu Leu Ser His Ile His Ala Ser Ser Tyr
```

```
          35                    40                    45

Ile Ser Pro Glu Lys Glu Glu Gln Tyr Ile Ala Gln Phe Thr Ser Gln
     50                    55                    60

Phe Leu Ser Leu Gln Cys Leu Gln Leu Leu Tyr Val Asp Ser Leu Phe
 65                    70                    75                    80

Phe Leu Arg Gly Arg Leu Asp Gln Leu Leu Arg His Val Met Asn Pro
                   85                    90                    95

Leu Glu Thr Leu Ser Ile Thr Asn Cys Arg Leu Ser Glu Gly Asp Val
                  100                   105                   110

Met His Leu Ser Gln Ser Pro Ser Val Ser Gln Leu Ser Val Leu Ser
             115                   120                   125

Leu Ser Gly Val Met Leu Thr Asp Val Ser Pro Glu Pro Leu Gln Ala
        130                   135                   140

Leu Leu Glu Arg Ala Ser Ala Thr Leu Gln Asp Leu Val Phe Asp Glu
145                   150                   155                   160

Cys Gly Ile Thr Asp Asp Gln Leu Leu Ala Leu Leu Pro Ser Leu Ser
                  165                   170                   175

His Cys Ser Gln Leu Thr Thr Leu Ser Phe Tyr Gly Asn Ser Ile Ser
             180                   185                   190

Ile Ser Ala Leu Gln Ser Leu Leu Gln His Leu Ile Gly Xaa Ser Asn
             195                   200                   205

Leu Thr His Val Leu Tyr Pro Val Pro Leu Glu Ser Tyr Glu Asp Ile
        210                   215                   220

His Gly Xaa Leu Xaa Leu Glu Arg Leu Leu Ser Ala Cys Gln Xaa Gln
225                   230                   235                   240

Gly Val Ala Val
```

```
<210> 455
<211> 195
<212> PRT
<213> Homo sapiens

<400> 455
His Glu Gly Thr Gln Ser Phe Val Phe Gln Arg Glu Glu Ile Ala Gln
 1               5                   10                  15
```

```
Leu Ala Arg Gln Tyr Ala Gly Leu Asp His Glu Leu Ala Phe Ser Arg
            20              25              30

Leu Ile Val Glu Leu Arg Arg Leu His Pro Gly His Val Leu Pro Asp
            35              40              45

Glu Glu Leu Gln Trp Val Phe Val Asn Ala Gly Gly Trp Met Gly Ala
        50              55              60

Met Cys Leu Leu His Ala Ser Leu Ser Glu Tyr Val Leu Leu Phe Gly
65              70              75              80

Thr Ala Leu Gly Ser Arg Gly His Ser Gly Arg Tyr Trp Ala Glu Ile
                85              90              95

Ser Asp Thr Ile Ile Ser Gly Thr Phe His Gln Trp Arg Glu Gly Thr
            100             105             110

Thr Lys Ser Glu Val Phe Tyr Pro Gly Glu Thr Val Val His Gly Pro
            115             120             125

Gly Glu Ala Thr Ala Val Glu Trp Gly Pro Asn Thr Trp Met Val Glu
        130             135             140

Tyr Gly Arg Gly Val Ile Pro Ser Thr Leu Ala Phe Ala Leu Ala Asp
145             150             155             160

Thr Val Phe Ser Thr Gln Asp Phe Leu Thr Leu Phe Tyr Thr Leu Arg
                165             170             175

Ser Tyr Ala Arg Gly Leu Arg Leu Glu Leu Thr Thr Tyr Leu Phe Gly
            180             185             190

Gln Asp Pro
            195


<210> 456
<211> 36
<212> PRT
<213> Homo sapiens

<400> 456
Leu Val Thr Leu Leu His Ala Met Gln Ala Arg Asp Lys Thr Leu Gly
    1               5               10              15

Leu Ala Thr Leu Cys Ile Gly Gly Gly Gln Gly Ile Ala Met Val Ile
                20              25              30
```

```
Glu Arg Leu Asn
          35


<210> 457
<211> 152
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 457
Val Thr Ala Ala Ala Ser Val Arg Ala Leu Gln Val Thr Val Ala Gly
 1               5                  10                  15


Leu Leu Leu Val Phe Phe Leu Phe Gly Ala Pro Leu Asp Ser Leu Pro
              20              25                  30


Ser Met Lys Ala Leu Ser Pro Val Arg Gly Cys Tyr Glu Ala Val Cys
          35              40                  45


Cys Leu Ser Glu Arg Ser Leu Ala Ile Ala Arg Gly Arg Gly Lys Gly
     50              55                  60


Pro Ala Ala Glu Glu Pro Leu Ser Leu Leu Asp Asp Met Asn His Cys
 65              70                  75                  80


Tyr Ser Arg Leu Arg Xaa Leu Val Pro Gly Val Pro Arg Gly Thr Gln
              85                  90                  95


Leu Ser Gln Val Glu Ile Leu Gln Arg Val Ile Asp Tyr Ile Leu Asp
              100             105                 110


Leu Xaa Val Val Leu Ala Glu Pro Ala Pro Gly Pro Pro Asp Gly Pro
         115             120                 125


His Leu Pro Ile Gln Thr Ala Glu Leu Ala Pro Glu Leu Val Ile Ser
          130             135                 140


Asn Asp Lys Arg Ser Phe Cys His
145                 150
```

```
<210> 458
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 458
Leu Leu Asn Asn Phe Ile Phe Leu Glu Thr His Tyr Leu Trp Ala Cys
 1               5                  10                  15

Xaa Thr Trp Thr Ile Trp Pro Asn Xaa Leu Asp Lys Lys Gly Xaa
            20                  25                  30


<210> 459
<211> 157
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (130)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 459
Asp Pro Arg Val Arg Glu Thr Thr Val Lys Ala Arg Ala Arg Ser Gln
 1   5   10   15

His Ala Gly Gly Pro Glu Leu Gly Leu Ser Gln Xaa Tyr Val Thr Pro
            20   25   30

Arg Arg Pro Phe Glu Lys Ser Arg Leu Asp Gln Glu Leu Lys Leu Ile
         35   40   45

Gly Glu Tyr Gly Leu Arg Asn Lys Arg Glu Val Trp Arg Val Lys Phe
    50   55   60

Thr Leu Ala Lys Ile Arg Lys Xaa Ala Arg Glu Leu Leu Thr Leu Asp
65   70   75   80

Glu Lys Asp Pro Arg Arg Leu Phe Glu Gly Asn Ala Leu Leu Arg Arg
            85   90   95

Leu Val Arg Ile Gly Val Leu Asp Glu Gly Lys Met Lys Leu Asp Tyr
         100   105   110

Ile Leu Gly Leu Lys Met Arg Ile Leu Gly Glu Xaa Ser Ala Asp Pro
         115   120   125

Gly Xaa Ser Ser Trp Gly Trp Pro Ile His Pro Pro Cys Pro Val Leu
    130   135   140

Ile Arg Gln Ala Thr Gln Val Arg Lys Gln Val Val Asn
145   150   155

<210> 460
<211> 136
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (130)

408

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 460
Ile Trp Ala Pro Phe Pro His His Gln Gly Ser Gly Ser Gln Val Ser
 1           5               10              15

Ser Tyr Gly Thr Gly Ala Leu Lys Ser His Ile Met Ala Ala Lys Ala
           20              25              30

Val Ala Asn Thr Met Arg Thr Ser Leu Gly Pro Asn Gly Leu Asp Lys
       35              40              45

Met Met Val Asp Lys Asp Gly Asp Val Thr Val Thr Asn Asp Gly Ala
     50              55              60

Thr Ile Leu Ser Met Met Asp Val Asp His Gln Ile Ala Lys Leu Met
 65              70              75              80

Val Glu Leu Ser Lys Ser Gln Asp Asp Glu Ile Gly Asp Gly Asp His
               85              90              95

Gly Gly Gly Cys Pro Gly Arg Arg Pro Ala Gly Arg Arg Pro Ser Ser
           100             105             110

Cys Trp Thr Ala Ala Phe Xaa Arg Ser Gly Ser Pro Thr Val Thr Ser
       115             120             125

Arg Xaa Pro Ala Leu Ala Xaa Glu
   130             135
```

```
<210> 461
<211> 390
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>
<221> SITE
<222> (375)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (382)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (383)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (386)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (387)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 461
Cys Gly Asn Trp Trp Val Pro Arg Ala Gly Xaa Asn Trp Xaa Arg Gly
 1               5                  10                  15


Ser Arg Phe Leu Phe Val Asp Arg Cys Asp Arg His Leu Thr Met Gln
            20                  25                  30


Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu
            35                  40                  45


Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu
        50                  55                  60


Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu
65                  70                  75                  80


Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr
                85                  90                  95


Leu His Leu Val Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys
            100                 105                 110


Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu Pro Ser Asp Thr
            115                 120                 125
```

```
Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro
    130               135               140

Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp Gly Arg
145               150               155               160

Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr Leu His Leu Val
                165               170               175

Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys Thr Leu Thr Gly
            180               185               190

Lys Thr Ile Thr Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val
            195               200               205

Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg
    210               215               220

Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp
225               230               235               240

Tyr Asn Ile Gln Lys Glu Ser Thr Leu His Leu Val Leu Arg Leu Arg
                245               250               255

Gly Gly Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr
            260               265               270

Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile
            275               280               285

Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala
    290               295               300

Gly Lys Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln
305               310               315               320

Lys Glu Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly Met Gln
                325               330               335

Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu
            340               345               350

Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Arg Ser Arg Gln Gly Arg
            355               360               365

His Pro Pro Asp Gln Gln Xaa Leu Ile Leu Leu Gly Lys Xaa Xaa Lys
    370               375               380

Trp Xaa Xaa Pro Phe Asp
385               390
```

411

```
<210> 462
<211> 171
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 462
Cys Ser Thr Val Arg Ile Pro Gly Ser Thr His Ala Ser Gly Leu Ser
 1               5                  10                  15

Arg Arg Ala Ser Pro Val Tyr Leu Ala Ser Met Ser Gly Arg Gly Lys
            20                  25                  30

Thr Gly Gly Lys Ala Arg Ala Lys Ala Lys Ser Arg Ser Ser Arg Ala
            35                  40                  45

Gly Leu Gln Phe Pro Val Gly Arg Val His Arg Leu Leu Arg Lys Gly
        50                  55                  60

His Tyr Ala Glu Arg Val Gly Ala Gly Xaa Pro Val Tyr Leu Ala Ala
65                  70                  75                  80

Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala
                85                  90                  95

Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His Leu Gln Leu
            100                 105                 110

Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu Leu Gly Gly Val Thr
        115                 120                 125
```

412

```
Ile Ala Gln Gly Arg Arg Xaa Ala Gln His Pro Gly Arg Xaa Cys Cys
    130             135             140
```

```
Pro Arg Arg Pro Ala Pro Pro Trp Gly Arg Xaa Pro Phe Gly Gly Gln
145             150             155             160
```

```
Glu Arg Ala Thr Lys Ala Ser Gln Gly Val Leu
            165             170
```

```
<210> 463
<211> 433
<212> PRT
<213> Homo sapiens

<400> 463
Arg Val Arg Ala Pro Pro Arg Pro Pro Leu Gly Pro Ser Arg Pro Ser
    1           5           .   10              15
```

```
His His Val His Pro Leu Gln Leu Pro Gly Ile Arg Glu Val Thr Ile
            20              25              30
```

```
Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Asp Ala Asp Pro Ser Leu
            35              40              45
```

```
Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys Thr Leu Asn Asn
    50              55              60
```

```
Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn
65              70              75              80
```

```
Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu Gln Lys Ser Ala
            85              90              95
```

```
Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln Ile Ala Gly Leu .
            100             105             110
```

```
Arg Gly Gln Leu Glu Ala Leu Gln Val Asp Gly Gly Arg Leu Glu Ala
            115             120             125
```

```
Glu Leu Arg Ser Met Gln Asp Val Val Glu Asp Phe Lys Asn Lys Tyr
    130             135             140
```

```
Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn Glu Phe Val Val
145             150             155             160
```

```
Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys Val Glu Leu Glu
            165             170             175
```

413

```
Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe Leu Arg Thr Leu
        180                 185                 190

Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile Ser Asp Thr Ser
        195                 200                 205

Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Leu Asp Gly Ile
    210                 215                 220

Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala Lys Cys Ser Arg
225                 230                 235                 240

Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu Thr Leu Gln Ala
            245                 250                 255

Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr Arg Asn Glu Ile
            260                 265                 270

Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala Glu Ile Asp Asn
        275                 280                 285

Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile Ala Glu Ala Glu
        290                 295                 300

Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala Lys Gln Glu Glu
305                 310                 315                 320

Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met Ala Arg Gln Leu
            325                 330                 335

Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile Glu
            340                 345                 350

Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Ser Arg Leu Ala
            355                 360                 365

Gly Asp Gly Val Gly Ala Val Asn Ile Ser Val Met Asn Ser Thr Gly
    370                 375                 380

Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu Gly Gly Thr Met
385                 390                 395                 400

Gly Ser Asn Ala Leu Ser Phe Ser Ser Ser Ala Gly Pro Gly Leu Leu
            405                 410                 415

Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg Arg Ser Ala Arg
            420                 425                 430

Asp
```

```
<210> 464
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 464
Gly Ser Gly Cys Val Phe Ala Ile Leu Gly Arg Arg Cys Ser Arg Pro
 1               5                  10                  15


Trp Arg Ile Trp Pro Gly Glu Pro Leu Gln Arg Ala Pro Pro Ala Ala
            20                  25                  30


Gly Thr Arg Trp Pro His Gly His Arg Ser Ser Pro Val Gly Thr Pro
        35                  40                  45


Gly Xaa Ala Pro Asn Val Pro Ala Ile Trp Gln Gln Pro Leu Trp Xaa
    50                  55                  60


Glu Tyr Ser Cys Glu Tyr Gly Ser Met Lys Phe Tyr Ala Leu Cys Gly
```

```
            65                  70                  75                  80

Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val Val Pro
                85                  90                  95

Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Xaa Tyr Lys
            100                 105                 110

Gly Xaa Xaa Asn Xaa Ile Leu Ile Asn
        115                 120
```

<210> 465
<211> 68
<212> PRT
<213> Homo sapiens

<400> 465

```
Arg Ile Pro Ala Pro Ala Ser Ser Arg His Ser Gly Gly Arg Cys Ala
  1               5                  10                  15

Ala Gly Pro Arg Gly Pro Pro Ala Thr Ala Ser Arg Ala Leu Arg Ala
            20                  25                  30

Val His Arg Pro Leu Asp Ala Ala Arg Gly Arg Thr Gly Ser Thr Ser
            35                  40                  45

His Leu Cys Ser Ser Ser Tyr Thr Ile Gly Cys Leu Leu Trp Phe Ser
        50                  55                  60

Gln Lys Ala Met
 65
```

<210> 466
<211> 224
<212> PRT
<213> Homo sapiens

<400> 466

```
Ala Thr Ile Leu Glu Arg Glu Ala Glu Gln Ser Arg Leu Gly Ala Thr
  1               5                  10                  15

Glu Arg Ala Ala Ala Ala Ala Met Asn Pro Glu Tyr Asp Tyr Leu Phe
            20                  25                  30

Lys Leu Leu Leu Ile Gly Asp Ser Gly Val Gly Lys Ser Cys Leu Leu
            35                  40                  45
```

```
Leu Arg Phe Ala Asp Asp Thr Tyr Thr Glu Ser Tyr Ile Ser Thr Ile
    50                  55                  60

Gly Val Asp Phe Lys Ile Arg Thr Ile Glu Leu Asp Gly Lys Thr Ile
65                  70                  75                  80

Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Thr Ile
                85                  90                  95

Thr Ser Ser Tyr Tyr Arg Gly Ala His Gly Ile Ile Val Val Tyr Asp
                100                 105                 110

Val Thr Asp Gln Glu Ser Tyr Ala Asn Val Lys Gln Trp Leu Gln Glu
            115                 120                 125

Ile Asp Arg Tyr Ala Ser Glu Asn Val Asn Lys Leu Leu Val Gly Asn
    130                 135                 140

Lys Ser Asp Leu Thr Thr Lys Lys Val Val Asp Asn Thr Thr Ala Lys
145                 150                 155                 160

Glu Phe Ala Asp Ser Leu Gly Ile Pro Phe Leu Glu Thr Ser Ala Lys
                165                 170                 175

Asn Ala Thr Asn Val Glu Gln Ala Phe Met Thr Met Ala Ala Glu Ile
                180                 185                 190

Lys Lys Arg Met Gly Pro Gly Ala Ala Ser Gly Gly Glu Arg Pro Asn
            195                 200                 205

Leu Lys Ile Asp Ser Thr Pro Val Lys Pro Ala Gly Gly Gly Cys Cys
    210                 215                 220
```

<210> 467
<211> 76
<212> PRT
<213> Homo sapiens

<400> 467
```
Ser Glu Ala Pro Gly Glu Ser Val Gly Thr Thr Pro Glu Ala Gln Met
    1           5                   10                  15

Lys Thr Gly Pro Phe Ala Glu His Ser Asn Gln Leu Trp Asn Ile Ser
                20                  25                  30

Ala Val Pro Ser Trp Ser Lys Val Asn Gln Gly Leu Ile Arg Met Tyr
```

417

```
          35                    40                    45
Lys Ala Glu Cys Leu Glu Lys Phe Pro Val Ile Gln His Phe Lys Phe
    50                    55                    60

Gly Ser Leu Leu Pro Ile His Pro Val Thr Ser Gly
65                    70                    75



<210> 468
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 468
Ser Leu Ala Arg Thr Gly Pro Arg Ser Leu Ala Arg Pro Cys Arg Arg
  1                 5                    10                    15

Arg Pro Ala His Arg His Pro Leu Gln Pro Cys Pro Pro Gly Xaa Cys
              20                    25                    30
```

```
Pro Arg Xaa Pro Thr Ala Asp Val Arg Arg Pro Arg His Arg Xaa Arg
        35              40                  45

Xaa Glu Leu His Ala His Asn Val Thr Ser Pro Pro Ala Pro Thr Ala
    50              55                  60

Trp Ala Ala Pro Ala Pro Gln His Gln Pro Gln Pro Leu Xaa Leu Val
65              70                  75                      80

Pro Gly Arg Arg Val Cys Ser Arg Leu Leu Pro Arg Cys Ala Cys Gly
                85              90                  95

Xaa Cys Cys Pro Gly Val Ala Leu Ala Gly Arg Ile Pro Trp Asn
            100             105                 110
```

<210> 469
<211> 459
<212> PRT
<213> Homo sapiens

<400> 469
```
Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Leu Ser Ser Pro
1               5                   10                  15

Ser Pro Val Cys Leu Pro Pro Ala Ala Ala Thr Met Thr Thr Ser Ile
            20                  25                  30

Arg Gln Phe Thr Ser Ser Ser Ser Ile Lys Gly Ser Ser Gly Leu Gly
        35                  40                  45

Gly Gly Ser Ser Arg Thr Ser Cys Arg Leu Ser Gly Gly Leu Gly Ala
    50                  55                  60

Gly Ser Cys Arg Leu Gly Ser Ala Gly Gly Leu Gly Ser Thr Leu Gly
65                  70                  75                      80

Gly Ser Ser Tyr Ser Ser Cys Tyr Ser Phe Gly Ser Gly Gly Gly Tyr
                85                  90                  95

Gly Ser Ser Phe Gly Gly Val Asp Gly Leu Leu Ala Gly Gly Glu Lys
            100                 105                 110

Ala Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys
        115                 120                 125

Val Arg Ala Leu Glu Glu Ala Asn Thr Glu Leu Glu Val Lys Ile Arg
    130                 135                 140
```

```
Asp Trp Tyr Gln Arg Gln Ala Pro Gly Pro Ala Arg Asp Tyr Ser Gln
145              150              155              160

Tyr Tyr Arg Thr Ile Glu Glu Leu Gln Asn Lys Ile Leu Thr Ala Thr
            165              170              175

Val Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp Asn Ala Arg Leu Ala
        180              185              190

Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg Leu
        195              200              205

Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu
    210              215              220

Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile Glu Asn Leu Lys Glu
225              230              235              240

Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Met Asn Ala Leu
            245              250              255

Arg Gly Gln Val Gly Gly Glu Ile Asn Val Glu Met Asp Ala Ala Pro
        260              265              270

Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met Arg Asp Gln Tyr Glu
        275              280              285

Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu Asp Trp Phe Phe Ser
    290              295              300

Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr Asn Ser Glu Leu Val
305              310              315              320

Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg Arg Thr Met Gln Ala
            325              330              335

Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys Ala Ser Leu Glu
            340              345              350

Gly Asn Leu Ala Glu Thr Glu Asn Arg Tyr Cys Val Gln Leu Ser Gln
        355              360              365

Ile Gln Gly Leu Ile Gly Ser Val Glu Glu Gln Leu Ala Gln Leu Arg
        370              375              380

Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys Ile Leu Leu Asp Val
385              390              395              400

Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu
            405              410              415
```

```
Gly Glu Asp Ala His Leu Thr Gln Tyr Lys Lys Glu Pro Val Thr Thr
            420             425             430

Arg Gln Val Arg Thr Ile Val Glu Glu Val Gln Asp Gly Lys Val Ile
            435             440             445

Ser Ser Arg Glu Gln Val His Gln Thr Thr Arg
    450             455
```

```
<210> 470
<211> 158
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 470
Pro Pro Pro Pro Pro Pro Pro Glu Leu Cys Ser Met Ala Ser Arg Arg
 1               5               10              15

Met Glu Thr Lys Pro Val Ile Thr Cys Leu Lys Thr Leu Leu Ile Ile
            20              25              30

Tyr Ser Phe Val Phe Trp Ile Thr Gly Val Ile Leu Leu Ala Val Gly
        35              40              45

Val Trp Gly Lys Leu Thr Leu Gly Thr Tyr Ile Ser Leu Ile Ala Glu
    50              55              60

Asn Ser Thr Asn Ala Pro Tyr Val Leu Ile Gly Thr Gly Thr Thr Ile
65              70              75              80

Val Val Phe Gly Leu Phe Gly Cys Phe Ala Thr Cys Arg Gly Ser Pro
            85              90              95

Trp Met Leu Lys Leu Tyr Ala Met Phe Leu Ser Leu Val Phe Leu Ala
            100             105             110

Glu Leu Val Ala Gly Ile Ser Gly Phe Val Phe Arg His Glu Ile Lys
        115             120             125

Asp Thr Phe Leu Arg Thr Tyr Thr Asp Ala Met Gln Thr Tyr Asn Gly
    130             135             140

Asn Asp Glu Arg Ser Arg Ala Val Asp His Val Gln Arg Xaa
145             150             155
```

421

```
<210> 471
<211> 59
<212> PRT
<213> Homo sapiens

<400> 471
Val Leu Phe Phe Tyr Glu Cys Pro Asn Leu Cys Phe Pro Leu Pro Ser
 1               5                   10                  15


Gln Thr Val Trp Pro Val Glu Ser Val Trp Phe Val Phe Ile Ser Pro
                20                  25                  30


Ser Phe Leu Glu Gln Gly Leu Arg Pro Cys His Ile Ser Tyr Ala Leu
            35                  40                  45


His Pro Arg Leu Phe Trp Thr Leu Lys Val Asp
        50                  55



<210> 472
<211> 320
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 472
Asp Pro Asp Glu Val Phe Pro Val Cys Leu Pro Leu Thr Gly Asp Ala
 1               5                   10                  15
```

```
Gly Glu Asp Gly Gly Lys Met Leu His Leu Pro Glu Trp Pro Glu Gln
            20                  25              30

Pro Pro Gly Gly Pro Ala Ala Leu Gln Val Arg Gly Ala Glu Asp Xaa
            35                  40              45

Xaa Leu Ser Phe Xaa Asp Cys Glu Ser Leu Gln Ala Val Phe Asp Pro
    50                  55              60

Ala Ser Cys Pro His Met Leu Arg Ala Pro Ala Arg Val Leu Gly Glu
65                  70              75                  80

Ala Val Leu Pro Phe Ser Pro Ala Leu Ala Glu Val Thr Leu Gly Ile
                85                  90                  95

Gly Arg Gly Ala Gly Ser Ser Trp Xaa Tyr His Glu Glu Glu Ala Asp
            100                 105             110

Ser Thr Ala Lys Ala Met Val Thr Glu Met Cys Leu Gly Glu Glu Asp
            115                 120             125

Phe Gln Gln Leu Gln Ala Gln Glu Gly Val Ala Ile Thr Phe Cys Leu
    130                 135             140

Lys Glu Phe Arg Gly Leu Leu Ser Phe Ala Glu Ser Ala Asn Leu Asn
145                 150             155                 160

Leu Ser Ile His Phe Asp Ala Pro Gly Arg Pro Ala Ile Phe Thr Ile
                165                 170             175

Lys Asp Ser Leu Leu Asp Gly His Phe Val Leu Ala Thr Leu Ser Asp
            180                 185             190

Thr Asp Ser His Ser Gln Asp Leu Gly Ser Pro Glu Arg His Gln Pro
            195                 200             205

Val Pro Gln Leu Gln Ala His Ser Thr Pro His Pro Asp Asp Phe Ala
    210                 215             220

Asn Asp Asp Ile Asp Ser Tyr Met Ile Ala Met Glu Thr Thr Ile Gly
225                 230             235                 240

Asn Glu Gly Ser Arg Val Leu Pro Ser Ile Ser Leu Ser Pro Gly Pro
            245                 250             255

Gln Pro Pro Lys Ser Pro Gly Pro His Ser Glu Glu Glu Asp Glu Ala
            260                 265             270

Glu Pro Ser Thr Val Pro Gly Thr Pro Pro Pro Lys Lys Phe Arg Ser
    275                 280             285
```

```
Leu Phe Phe Gly Ser Ile Leu Ala Pro Val Arg Ser Pro Gln Gly Pro
    290             295             300

Ser Leu Cys Trp Arg Lys Thr Val Arg Val Lys Ala Glu Pro Arg Thr
305             310             315             320
```

<210> 473
<211> 331
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (283)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (299)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (324)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 473
```
Pro Pro Cys Ala Val Pro Gly Pro Arg Leu Ser Pro Lys Leu Arg Thr
 1           5               10              15

Pro Ser Asn Ser Arg Glu Ser Xaa Ile Cys Val Ser Gly Arg Ala Glu
            20              25              30

Ala Leu Thr Phe Arg His Gly Ala Glu Gly Ser Asp Arg Arg Arg Gln
        35              40              45

Arg Arg Glu Gly Val Leu Gly Pro Ala Leu Leu Cys Arg Pro Trp Glu
    50              55              60

Val Leu Gly Ala His Glu Val Pro Ser Arg Asn Ile Phe Ser Glu Gln
```

424

```
        65                      70                      75                      80

Thr Ile Pro Pro Ser Ala Lys Tyr Gly Gly Arg His Thr Val Thr Met
                    85                      90                      95

Ile Pro Gly Asp Gly Ile Gly Pro Glu Leu Met Leu His Val Lys Ser
                100                     105                     110

Val Phe Arg His Ala Cys Val Pro Val Asp Phe Glu Glu Val His Val
        115                     120                     125

Ser Ser Asn Ala Asp Glu Glu Asp Ile Arg Asn Ala Ile Met Ala Ile
        130                     135                     140

Arg Arg Asn Arg Val Ala Leu Lys Gly Asn Ile Glu Thr Asn His Asn
145                     150                     155                     160

Leu Pro Pro Ser His Lys Ser Arg Asn Asn Ile Leu Arg Thr Ser Leu
                165                     170                     175

Asp Leu Tyr Ala Asn Val Ile His Cys Lys Ser Leu Pro Gly Val Val
                180                     185                     190

Thr Arg His Lys Asp Ile Asp Ile Leu Ile Val Arg Glu Asn Thr Glu
        195                     200                     205

Gly Glu Tyr Ser Ser Leu Glu His Glu Ser Val Ala Gly Val Val Glu
        210                     215                     220

Ser Leu Lys Ile Ile Thr Lys Ala Lys Ser Leu Arg Ile Ala Glu Tyr
225                     230                     235                     240

Ala Phe Lys Leu Ala Gln Glu Ser Gly Arg Lys Lys Val Thr Ala Val
                245                     250                     255

His Lys Ala Asn Ile Met Lys Leu Gly Asp Gly Leu Phe Leu Gln Cys
                260                     265                     270

Cys Arg Glu Val Ala Ala Arg Tyr Pro Gln Xaa Thr Phe Glu Asn Met
        275                     280                     285

Ile Val Asp Asn Thr Thr Met Gln Leu Val Xaa Arg Pro Gln Gln Phe
        290                     295                     300

Asp Val Met Val Met Pro Asn Leu Tyr Gly Asn Ile Val Lys Gln Cys
305                     310                     315                     320

Leu Arg Gly Xaa Gly Arg Gly Pro Lys Leu Val
                325                     330
```

<210> 474
<211> 30
<212> PRT
<213> Homo sapiens

<400> 474
Thr Pro Ile Ser Thr Lys Asn Thr Lys Ile Ser Gln Ala Arg Trp Arg
 1   5   10   15

Ala His Val Val Pro Ala Thr Arg Glu Ala Asp Ala Glu Glu
            20   25   30

<210> 475
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 475
Thr Gln Phe Ser Leu Ser Pro Val Glu Thr Ile Tyr Thr Ile Leu Cys
 1   5   10   15

Ile Asn Val Tyr Thr Leu Pro Ile Cys Ile His Ile Tyr Ile Val Tyr
            20   25   30

Ile Leu Tyr Met Tyr Arg Cys Val Tyr Val His Ile Tyr Thr His Ala
            35   40   45

His Asn Lys Ile Arg Cys Ser Leu Gln Ile Gln Met Leu Ile Thr Lys
    50   55   60

Pro Asp Ala Thr Gln Thr Ala Ala Glu Glu Thr Arg Leu Asp Ser Cys
65   70   75   80

Asn Arg Ser Gln Lys Ile Lys Thr Ala Thr Cys Ser Asp Phe Gly His
                85   90   95

Phe Cys Met Phe Ile Lys Asn Gly Phe Val Thr Arg Lys Xaa Arg Thr
            100   105   110

Ser Val Ser Glu Lys Gly Arg Trp Gly Glu Pro Ser
            115   120

426

```
<210> 476
<211> 64
<212> PRT
<213> Homo sapiens

<400> 476
Asn Gly Tyr Leu Val Phe Pro Arg Lys Asn Ser Phe Leu Leu Ile Phe
1               5                   10                  15

Gly Leu Phe Val Tyr Leu Glu Thr Asn Leu Asp Ser Leu Pro Leu Val
            20                  25                  30

Asp Thr His Ser Lys Arg Thr Leu Leu Ile Lys Thr Val Glu Thr Arg
            35                  40                  45

Asp Gly Gln Val Ile Asn Glu Thr Ser Gln His His Asp Asp Leu Glu
        50                  55                  60


<210> 477
<211> 107
<212> PRT
<213> Homo sapiens

<400> 477
Val Leu Thr Val Asp Ala Arg Asn His Gly Asp Ser Pro His Ser Pro
1               5                   10                  15

Asp Met Ser Tyr Glu Ile Met Ser Gln Asp Leu Gln Asp Leu Leu Pro
            20                  25                  30

Gln Leu Gly Leu Val Pro Cys Val Val Val Gly His Ser Met Gly Gly
            35                  40                  45

Lys Thr Ala Met Leu Leu Ala Leu Gln Arg Pro Glu Leu Val Glu Arg
        50                  55                  60

Leu Ile Ala Val Asp Ile Ser Pro Val Glu Ser Thr Gly Val Ser His
65                  70                  75                  80

Phe Ala Thr Tyr Val Ala Ala Met Arg Ala Ile Asn Ile Ala Asp Arg
                85                  90                  95

Leu Ala Pro Leu Pro Cys Pro Lys Thr Gly Gly
                100                 105
```

```
<210> 478
<211> 282
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (281)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 478
Arg Glu Leu Gly Gly Thr Leu Leu Ser Ala Ile Glu Val Glu Gly Ala
 1               5                  10                  15

Lys Met Gln Ser Asn Lys Thr Phe Asn Leu Glu Lys Gln Asn His Thr
            20                  25                  30

Pro Arg Lys His His Gln His His His Gln Gln Gln His His Gln Gln
        35                  40                  45

Gln Gln Gln Gln Pro Pro Pro Pro Pro Ile Pro Ala Asn Gly Gln Gln
        50                  55                  60

Ala Ser Ser Gln Asn Glu Gly Leu Thr Ile Asp Leu Lys Asn Phe Arg
 65                  70                  75                  80

Lys Pro Gly Glu Lys Thr Phe Thr Gln Arg Ser Arg Leu Phe Val Gly
                85                  90                  95

Asn Leu Pro Pro Asp Ile Thr Glu Glu Glu Met Arg Lys Leu Phe Glu
            100                 105                 110

Lys Tyr Gly Lys Ala Gly Glu Val Phe Ile His Lys Asp Lys Gly Phe
        115                 120                 125

Gly Phe Ile Arg Leu Glu Thr Arg Thr Leu Ala Glu Ile Ala Lys Val
        130                 135                 140

Glu Leu Asp Asn Met Pro Leu Arg Gly Lys Gln Leu Arg Val Arg Phe
145                 150                 155                 160

Ala Cys His Ser Ala Ser Leu Thr Val Arg Asn Leu Pro Gln Tyr Val
                165                 170                 175

Ser Asn Glu Leu Leu Glu Glu Ala Phe Ser Val Phe Gly Gln Val Glu
            180                 185                 190

Arg Ala Val Val Ile Val Asp Asp Arg Gly Arg Pro Ser Gly Lys Gly
        195                 200                 205
```

```
Ile Val Glu Phe Ser Gly Lys Pro Ala Ala Arg Lys Ala Leu Asp Arg
    210                 215                 220

Cys Ser Glu Gly Ser Phe Leu Leu Thr Thr Phe Pro Arg Pro Val Thr
225                 230                 235                 240

Val Glu Pro Met Asp Gln Leu Asp Asp Glu Glu Gly Leu Pro Glu Lys
                245                 250                 255

Leu Val Ile Lys Asn Gln Gln Phe His Lys Glu Arg Glu Gln Pro Pro
                260                 265                 270

Arg Phe Ala Gln Pro Gly Ser Phe Xaa Val
        275                 280
```

<210> 479
<211> 289
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (206)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (285)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 479
```
Ala Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Val Cys
  1                 5                 10                  15

Gly Pro Leu Ser Ala Pro Arg Gly Ser Arg Arg Pro Thr Val Pro Gly
            20                  25                  30

Thr Pro Ala Cys Leu Ala Arg Pro Ala Ala Gln Gly Phe Ser Ala Ala
```

```
            35                    40                    45

   Leu Pro Val Arg Trp Thr Gly Arg Arg Ala Gly Pro Ser Arg Pro Val
       50                    55                    60

   Pro Ile Gly Thr Pro Ser Arg Ala Ala Asp Pro Ser Gln Gly Glu Met
   65                    70                    75                    80

   Ser Ala Asp Ala Ala Ala Gly Ala Pro Leu Pro Arg Leu Cys Cys Leu
                       85                    90                    95

   Glu Lys Gly Pro Asn Gly Tyr Gly Phe His Leu His Gly Glu Lys Gly
                   100                   105                   110

   Lys Leu Gly Gln Tyr Ile Arg Leu Val Glu Pro Gly Ser Pro Ala Glu
                   115                   120                   125

   Lys Ala Gly Leu Leu Ala Gly Asp Arg Leu Val Glu Val Asn Gly Glu
               130                   135                   140

   Asn Val Glu Lys Glu Thr His Gln Gln Val Val Ser Arg Ile Arg Ala
   145                   150                   155                   160

   Ala Leu Asn Ala Val Arg Leu Leu Val Val Asp Pro Glu Thr Asp Glu
                   165                   170                   175

   Gln Leu Gln Lys Leu Gly Val Gln Val Arg Glu Glu Leu Leu Arg Ala
                   180                   185                   190

   Gln Glu Ala Pro Gly Gln Ala Glu Pro Pro Ala Ala Ala Xaa Val Gln
               195                   200                   205

   Gly Ala Gly Asn Glu Asn Xaa Pro Arg Xaa Ala Asp Lys Ser His Pro
       210                   215                   220

   Glu Gln Arg Glu Leu Arg Pro Arg Leu Cys Thr Met Lys Lys Gly Pro
   225                   230                   235                   240

   Ser Gly Tyr Gly Phe Asn Leu His Ser Asp Lys Ser Lys Pro Gly Gln
                   245                   250                   255

   Phe Ile Arg Ser Val Asp Pro Asp Ser Pro Ala Glu Ala Ser Gly Leu
               260                   265                   270

   Arg Ala Gln Asp Arg Ile Val Glu Val Met Leu Leu Xaa Ser Leu Pro
           275                   280                   285

   Ile
```

```
<210> 480
<211> 44
<212> PRT
<213> Homo sapiens

<400> 480
Gly Ser Thr His Ala Ser Gly Arg Asn Glu Gly Pro Pro Ala Lys Thr
1               5                   10                  15


Lys Ser Trp Val Gly Pro Thr Leu His Phe His Arg Lys Ser Glu His
            20                  25                  30


Leu Val Gly Leu Lys Val Leu Cys Cys Phe Arg Leu
            35                  40




<210> 481
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 481
Ser Ile Xaa His Xaa Arg Lys Xaa Xaa Xaa Thr Val Arg Ser Asp Ser
1               5                   10                  15
```

```
Arg Val Asp Pro Arg Ser Asp Asp Phe Thr Pro Leu Glu Ile Leu Trp
            20                  25              30

Thr Phe Ser Ile Tyr Leu Glu Ser Val Ala Ile Leu Pro Gln Leu Phe
            35                  40              45

Met Val Ser Lys Thr Gly Glu Ala Glu Thr Ile Thr Ser His Tyr Leu
        50                  55              60

Phe Ala Leu Gly Val Tyr Arg Thr Leu Tyr Leu Phe Asn Trp Ile Trp
65                  70              75                  80

Arg Tyr His Phe Glu Gly Phe Phe Asp Leu Ile Ala Ile Val Ala Gly
                85                  90                  95

Leu Val Gln Thr Val Leu Tyr Cys Asp Phe Phe Tyr Leu Tyr Ile Thr
            100                 105                 110

Lys Val Leu Lys Gly Lys Lys Leu Ser Leu Pro Ala
            115                 120
```

```
<210> 482
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 482
Cys Ser Ser Arg Gly Ala His His Ser His Cys Asp Arg Leu Pro His
```

432

```
1                5                    10                   15

Ser Pro Trp Pro Gly Leu Arg Glu Val Glu Leu Leu Ala Ser Val His
        20                  25                  30

Thr Glu Gln Met Glu Glu Glu Leu Ala Leu Gly Pro Arg Gly Gln Gly
        35                  40                  45

Gly Ala Ser Leu Ala Gly Arg Asp Gly Arg Ser Ala Gly Ala Gly Ser
    50                  55                  60

Tyr Gly Ala Leu Ala Asn Ser Ala Trp Gly Gly Pro Arg Lys Val Ala
65                  70                  75                  80

Ser Ala Ser Ala Ala Ala Ser Thr Leu Ser Glu Pro Pro Arg Arg Thr
            85                  90                  95

Gln Glu Ser Arg Thr Arg Thr Arg Ala Leu Gly Leu Pro Thr Leu Pro
            100                 105                 110

Met Glu Lys Leu Ala Ala Ser Asn Arg Xaa Pro Xaa Gly Leu Xaa Gly
        115                 120                 125

Pro Gly Xaa
    130
```

```
<210> 483
<211> 221
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 483
Lys Lys Pro Pro Ile Thr His Pro Ser Thr Pro Ala Glu Glu Thr Tyr  .
1                5                   10                   15

Asn Leu Gly Arg Gln Val Leu Pro Leu Ser Ala Val Thr Tyr Phe Gln
            20                  25                  30

Lys Ser Gly Pro Gly Leu Leu Pro Ala Pro Ala Thr Gln Ser Ala Ser
```

433

```
            35                    40                    45

Val Ala Gly Thr Leu Gln Asn Ser Leu Cys Ser Gln Val Thr Lys Lys
        50                    55                    60

Lys Arg Ala Asn Met Leu Val Leu Leu Ala Gly Ile Phe Val Val His
    65                    70                    75                    80

Ile Ala Thr Val Ile Met Leu Phe Val Ser Thr Ile Ala Asn Val Trp
                    85                    90                    95

Leu Val Ser Asn Thr Val Asp Ala Ser Val Gly Leu Trp Lys Asn Cys
                100                    105                   110

Thr Asn Ile Ser Cys Ser Asp Ser Leu Ser Tyr Ala Ser Glu Asp Ala
                115                    120                   125

Leu Lys Thr Val Gln Ala Phe Met Ile Leu Ser Ile Ile Phe Cys Val
        130                    135                   140

Ile Ala Leu Leu Val Phe Val Phe Gln Leu Phe Thr Met Glu Lys Gly
145                    150                   155                   160

Asn Arg Phe Phe Leu Ser Gly Xaa Thr Thr Leu Val Cys Xaa Leu Cys
                165                    170                   175

Ile Leu Val Gly Cys Pro Ser Thr Leu Val Ile Met Arg Ile Val Met
                180                    185                   190

Glu Arg Ile Cys Thr Thr Ala Ile Pro Thr Ser Trp Ala Gly Ser Ala
        195                    200                   205

Ser Ala Ser Ala Ser Ser Ser Ala Phe Ser Ile Trp Ser
    210                    215                   220
```

<210> 484
<211> 382
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

434

```
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (298)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (324)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (358)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 484
Thr Lys Leu Trp Thr Leu Val Ser Asn Pro Asp Thr Asp Ala Leu Ile
 1               5                   10                  15


Cys Trp Ser Pro Ser Xaa Asn Ser Phe His Val Phe Asp Gln Gly Gln
                20                  25                  30


Phe Ala Lys Glu Val Leu Pro Lys Tyr Phe Lys His Asn Asn Met Ala
            35                  40                  45


Ser Phe Val Arg Gln Xaa Asn Met Tyr Gly Phe Arg Lys Val Val His
        50                  55                  60


Ile Glu Gln Gly Xaa Leu Val Lys Pro Glu Arg Asp Asp Thr Glu Phe
65                  70                  75                  80


Gln His Pro Cys Phe Leu Arg Gly Gln Glu Gln Leu Leu Glu Asn Ile
                85                  90                  95


Lys Arg Lys Val Thr Ser Val Ser Thr Leu Lys Ser Glu Asp Ile Lys
            100                 105                 110


Ile Arg Gln Asp Ser Val Thr Lys Leu Leu Thr Asp Val Gln Leu Met
            115                 120                 125
```

435

```
Lys Gly Lys Gln Glu Cys Met Asp Ser Lys Leu Leu Ala Met Lys His
    130             135             140
```

```
Glu Asn Glu Ala Leu Trp Arg Glu Val Ala Ser Leu Arg Gln Lys His
145             150             155             160
```

```
Ala Gln Gln Gln Lys Val Val Asn Lys Leu Ile Gln Phe Leu Ile Ser
            165             170             175
```

```
Leu Val Gln Ser Asn Arg Ile Leu Gly Val Lys Arg Lys Ile Pro Leu
            180             185             190
```

```
Met Leu Asn Asp Ser Gly Ser Ala His Ser Met Pro Lys Tyr Ser Arg
        195             200             205
```

```
Gln Phe Ser Leu Glu His Val His Gly Ser Gly Pro Tyr Ser Ala Pro
    210             215             220
```

```
Ser Pro Ala Tyr Ser Ser Ser Ser Leu Tyr Ala Pro Asp Ala Val Ala
225             230             235             240
```

```
Ser Ser Gly Pro Ile Ile Ser Asp Ile Thr Glu Leu Ala Pro Ala Ser
            245             250             255
```

```
Pro Met Ala Ser Pro Gly Gly Ser Ile Asp Glu Arg Pro Leu Ser Ser
        260             265             270
```

```
Ser Pro Leu Val Arg Val Lys Glu Glu Pro Pro Ser Pro Pro Xaa Ser
        275             280             285
```

```
Pro Arg Val Glu Glu Ala Ser Pro Gly Xaa Pro Ser Ser Val Asp Thr
    290             295             300
```

```
Leu Leu Ser Pro Thr Ala Leu Ile Asp Ser Ile Leu Arg Glu Ser Glu
305             310             315             320
```

```
Pro Ala Pro Xaa Ser Val Thr Ala Leu Thr Asp Ala Arg Gly His Thr
            325             330             335
```

```
Asp Thr Glu Gly Arg Pro Pro Ser Pro Pro Thr Ser Thr Pro Glu
        340             345             350
```

```
Lys Cys Leu Ser Val Xaa Ala Trp Thr Arg Met Ser Ser Val Thr Thr
        355             360             365
```

```
Trp Met Leu Trp Thr Pro Thr Trp Ile Thr Cys Arg Pro Cys
    370             375             380
```

<210> 485

<211> 416
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (399)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 485
Pro Ser Val Ala Asn Val Gly Ser His Cys Asp Leu Ser Leu Lys Ile
  1   5   10   15

Pro Glu Ile Ser Ile Gln Asp Met Thr Ala Gln Val Thr Ser Pro Ser
              20   25   30

Gly Lys Thr His Glu Ala Glu Ile Val Glu Gly Glu Asn His Thr Tyr
          35   40   45

Cys Ile Arg Phe Val Pro Ala Glu Met Gly Thr His Thr Val Ser Val
      50   55   60

Lys Tyr Lys Gly Gln His Val Pro Gly Ser Pro Phe Gln Phe Thr Val
65   70   75   80

Gly Pro Leu Gly Glu Gly Gly Ala His Lys Val Arg Ala Gly Gly Pro
              85   90   95

Gly Leu Glu Arg Ala Glu Ala Gly Val Pro Ala Glu Phe Ser Ile Trp
          100   105   110

Thr Arg Glu Ala Gly Ala Gly Gly Leu Ala Ile Ala Val Glu Gly Pro
          115   120   125

Ser Lys Ala Glu Ile Ser Phe Glu Asp Arg Lys Asp Gly Ser Cys Gly
      130   135   140

Val Ala Tyr Val Val Gln Glu Pro Gly Asp Tyr Glu Val Ser Val Lys
145   150   155   160

Phe Asn Glu Glu His Ile Pro Asp Ser Pro Phe Val Val Pro Val Ala
                  165   170   175

Ser Pro Ser Gly Asp Ala Arg Arg Leu Thr Val Ser Ser Leu Gln Glu
              180   185   190

Ser Gly Leu Lys Val Asn Gln Pro Ala Ser Phe Ala Val Ser Leu Asn
          195   200   205

Gly Ala Lys Gly Ala Ile Asp Ala Lys Val His Ser Pro Ser Gly Ala
      210   215   220

437

```
Leu Glu Glu Cys Tyr Val Thr Glu Ile Asp Gln Asp Lys Tyr Ala Val
225             230             235             240

Arg Phe Ile Pro Arg Glu Asn Gly Val Tyr Leu Ile Asp Val Lys Phe
            245             250             255

Asn Gly Thr His Ile Pro Gly Ser Pro Phe Lys Ile Arg Val Gly Glu
            260             265             270

Pro Gly His Gly Gly Asp Pro Gly Leu Val Ser Ala Tyr Gly Ala Gly
        275             280             285

Leu Glu Gly Gly Val Thr Gly Asn Pro Ala Glu Phe Val Val Asn Thr
    290             295             300

Ser Asn Ala Gly Ala Gly Ala Leu Ser Val Thr Ile Asp Gly Pro Ser
305             310             315             320

Lys Val Lys Met Asp Cys Gln Glu Cys Pro Glu Gly Tyr Arg Val Thr
            325             330             335

Tyr Thr Pro Met Ala Pro Gly Ser Tyr Leu Ile Ser Ile Lys Tyr Gly
            340             345             350

Gly Pro Tyr His Ile Gly Gly Ser Pro Phe Lys Ala Lys Val Thr Gly
            355             360             365

Pro Arg Leu Val Ser Asn His Ser Leu His Glu Thr Ser Ser Val Phe
    370             375             380

Val Asp Ser Leu Thr Lys Ala Thr Cys Ala Pro Gln His Gly Xaa Pro
385             390             395             400

Gly Pro Gly Pro Ala Asp Ala Ser Lys Val Val Ala Lys Gly Trp Gly
            405             410             415
```

```
<210> 486
<211> 46
<212> PRT
<213> Homo sapiens

<400> 486
Phe Val Thr Ser Gly Lys Ile Ser Leu Tyr Val Tyr Ile Leu Thr Ile
 1           5               10              15
```

Arg Leu Asp Thr Asn Lys Ala Thr Leu Leu Thr Ala Ser Gly Glu Leu
            20   25   30

Ile Leu Phe Leu Ile Phe Phe Asn Lys Asp Ile Leu Arg Tyr
            35   40   45

<210> 487
<211> 162
<212> PRT
<213> Homo sapiens

<400> 487
Leu Gly Val Ala Leu Gly Ala Val Pro Lys Leu His Leu Gly Val Leu
  1   5   10   15

Val Ser Thr Gly Leu Arg Thr Ala Val Gly Ser Pro Arg Leu Pro Pro
            20   25   30

Thr Ala Leu Gly Ala Ala Tyr Gly Thr Ala Lys Ser Gly Thr Gly Ile
            35   40   45

Ala Ala Met Ser Val Met Arg Pro Glu Gln Ile Met Lys Ser Ile Ile
        50   55   60

Pro Val Val Met Ala Gly Ile Ile Ala Ile Tyr Gly Leu Val Val Ala
65   70   75   80

Val Leu Ile Ala Asn Ser Leu Asn Asp Asp Ile Ser Leu Tyr Lys Ser
                85   90   95

Phe Leu Gln Leu Gly Ala Gly Leu Ser Val Gly Leu Ser Gly Leu Ala
            100   105   110

Ala Gly Phe Ala Ile Gly Ile Val Gly Asp Ala Gly Val Arg Gly Thr
            115   120   125

Ala Gln Gln Pro Arg Leu Phe Val Gly Met Ile Leu Ile Leu Ile Phe
        130   135   140

Ala Glu Val Leu Gly Leu Tyr Gly Leu Ile Val Ala Leu Ile Leu Ser
145   150   155   160

Thr Lys

<210> 488
<211> 114

439

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 488
Gln Ala Leu Arg Pro Gly Ser Phe Arg Gly Thr Gly Arg Lys Arg Glu
 1               5                  10                  15

Arg Glu Arg Glu Arg Met Ser Leu Ser Asp Trp His Leu Ala Val Lys
                20                  25                  30

Leu Ala Asp Gln Pro Leu Ala Pro Lys Ser Ile Leu Gln Leu Pro Glu
            35                  40                  45

Ser Glu Leu Gly Glu Tyr Ser Leu Gly Gly Tyr Ser Ile Ser Phe Leu
        50                  55               · 60

Lys Gln Leu Ile Ala Gly Lys Leu Gln Glu Ser Val Pro Asp Pro Glu
65                  70                  75                  80

Leu Ile Asp Leu Ile Tyr Cys Gly Arg Lys Leu Lys Asp Asp Xaa Thr
                85                  90                  95

Leu Thr Ser Thr Val Phe Asn Leu Ala Pro His Pro Cys Ser Xaa Glu
            100                 105                 110

Xaa Leu
```

```
<210> 489
<211> 149
<212> PRT
<213> Homo sapiens

<220>
```

```
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 489
Ser Thr His Ala Ser Glu Asp Val Leu Ala Ala Pro Ser Gly Cys Arg
  1               5                  10                  15


Ala Ser Arg Pro Pro Thr Ser Gly Arg Glu Gln Phe Trp Ala Arg Gly
             20                  25                  30


Leu Ala Ala Ala Asp Met Thr Lys Gly Leu Val Leu Gly Ile Tyr Ser
         35                  40                  45


Lys Asp Lys Glu Asp Asp Val Pro Gln Phe Thr Ser Ala Gly Glu Asn
     50                  55                  60


Phe Asp Lys Leu Val Ser Gly Lys Leu Arg Glu Ile Leu Asn Ile Ser
 65              70                  75                  80


Gly Pro Pro Leu Lys Ala Gly Lys Thr Arg Thr Phe Tyr Gly Leu His
             85                  90                  95


Glu Asp Phe Pro Ser Val Val Val Val Gly Leu Gly Arg Lys Ala Ala
            100                 105                 110


Gly Val Asp Asp Gln Glu Asn Trp Xaa Glu Gly Lys Glu Asn Ile Arg
            115                 120                 125


Val Ala Met Gln Arg Gly Ala Gly Arg Phe Gln Asp Leu Xaa Ile Ser
        130                 135                 140


Ser Val Glu Gly Gly
145


<210> 490
<211> 527
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (311)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 490
Arg Arg Arg Ser Arg Gly Leu Ile Pro Gly Arg Ala Pro Gly Arg Arg
 1               5               10              15

Arg Pro Arg Ala His Glu Val Ala Arg Ala Pro Pro Pro Ile Ala Met
         20              25              30

Asp Arg Met Lys Lys Ile Lys Arg Gln Leu Ser Met Thr Leu Arg Gly
         35              40              45

Gly Arg Gly Ile Asp Lys Thr Asn Gly Ala Pro Glu Gln Ile Gly Leu
     50              55              60

Asp Glu Ser Gly Gly Gly Gly Gly Ser Asp Pro Gly Glu Ala Pro Thr
 65              70              75              80

Arg Ala Ala Pro Gly Glu Leu Arg Ser Ala Arg Gly Pro Leu Ser Ser
             85              90              95

Ala Pro Glu Ile Val His Glu Asp Leu Lys Met Gly Ser Asp Gly Glu
             100             105             110

Ser Asp Gln Ala Ser Ala Thr Ser Ser Asp Glu Val Gln Ser Pro Val
         115             120             125

Arg Val Arg Met Arg Asn His Pro Pro Arg Lys Ile Ser Thr Glu Asp
     130             135             140

Ile Asn Lys Arg Leu Ser Leu Pro Ala Asp Ile Arg Leu Pro Glu Gly
145             150             155             160

Tyr Leu Glu Lys Leu Thr Leu Asn Ser Pro Ile Phe Asp Lys Pro Leu
             165             170             175

Ser Arg Arg Leu Arg Arg Val Ser Leu Ser Glu Ile Gly Phe Gly Lys
         180             185             190

Leu Glu Thr Tyr Ile Lys Leu Asp Lys Leu Gly Glu Gly Thr Tyr Ala
         195             200             205

Thr Val Tyr Lys Gly Lys Ser Lys Leu Thr Asp Asn Leu Val Ala Leu
         210             215             220

Lys Glu Ile Arg Leu Glu His Glu Glu Gly Ala Pro Cys Thr Ala Ile
225             230             235             240

Arg Glu Val Ser Leu Leu Lys Asp Leu Lys His Ala Asn Ile Val Thr
             245             250             255

Leu His Asp Ile Ile His Thr Glu Lys Ser Leu Thr Leu Val Phe Glu
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442

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                    260                   265                   270

Tyr Leu Asp Lys Asp Leu Lys Gln Tyr Leu Asp Asp Cys Gly Asn Ile
        275                 280                 285

Ile Asn Met His Asn Val Lys Leu Phe Leu Phe Gln Leu Leu Arg Gly
        290                 295                 300

Leu Ala Tyr Cys His Arg Xaa Lys Val Leu His Arg Asp Leu Lys Pro
305                 310                 315                 320

Gln Asn Leu Leu Ile Asn Glu Arg Gly Glu Leu Lys Leu Ala Asp Phe
                325                 330                 335

Gly Leu Ala Arg Ala Lys Ser Ile Pro Thr Lys Thr Tyr Ser Asn Glu
                340                 345                 350

Val Val Thr Leu Trp Tyr Arg Pro Pro Asp Ile Leu Leu Gly Ser Thr
            355                 360                 365

Asp Tyr Ser Thr Gln Ile Asp Met Trp Gly Val Gly Cys Ile Phe Tyr
        370                 375                 380

Glu Met Ala Thr Gly Arg Pro Leu Phe Pro Gly Ser Thr Val Glu Glu
385                 390                 395                 400

Gln Leu His Phe Ile Phe Arg Ile Leu Gly Thr Pro Thr Glu Glu Thr
                405                 410                 415

Trp Pro Gly Ile Leu Ser Asn Glu Glu Phe Lys Thr Tyr Asn Tyr Pro
                420                 425                 430

Lys Tyr Arg Ala Glu Ala Leu Leu Ser His Ala Pro Arg Leu Asp Ser
        435                 440                 445

Asp Gly Ala Asp Leu Leu Thr Lys Leu Leu Gln Phe Glu Gly Arg Asn
        450                 455                 460

Arg Ile Ser Ala Glu Asp Ala Met Lys His Pro Phe Phe Leu Ser Leu
465                 470                 475                 480

Gly Glu Arg Ile His Lys Leu Pro Asp Thr Thr Ser Ile Phe Ala Leu
                485                 490                 495

Lys Glu Ile Gln Leu Gln Lys Glu Ala Ser Leu Arg Ser Ser Ser Met
        500                 505                 510

Pro Asp Ser Gly Arg Pro Ala Phe Arg Val Val Asp Thr Glu Phe
        515                 520                 525
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443

```
<210> 491
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 491
Cys Thr Arg Ala His Pro Lys Asn Leu Val Glu Lys Gly Ile Leu Thr
  1               5                  10                  15


Thr Glu Lys Gln Asn Phe Leu Leu Phe Asp Met Thr Thr His Pro Val
                 20                  25                  30


Thr Asn Thr Thr Glu Lys Gln Arg Leu Val Lys Lys Leu Gln Asp Ser
            35                  40                  45


Val Leu Glu Arg Trp Val Asn Asp Pro Gln Arg Met Asp Lys Arg Thr
       50                  55                  60


Leu Ala Leu Leu Val Leu Ala His Ser Ser Asp Val Leu Glu Asn Val
 65                  70                  75                  80


Phe Ser Ser Leu Thr Asp Asp Lys Tyr Asp Val Ala Met Asn Arg Ala
                 85                  90                  95


Lys Asp Leu Val Glu Leu Asp Pro Glu Val Glu Gly Thr Lys Pro Ser
            100                 105                 110


Ala Thr Glu Met Ile Trp Ala Val Leu Ala Ala Phe Xaa
            115                 120                 125
```

```
<210> 492
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
```

444

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 492
Val Ser Xaa Ser Ile Leu Ala Leu Leu Phe Asn Thr Asp Ala Leu Phe
 1   5   10   15

Ser Arg Val Tyr Glu Ser Leu Ser Asp Asn His Gly Leu Gln Glu Gln
            20   25   30

Thr Val Glu Lys Leu Phe Phe Gln Trp Lys Ser Trp Val Gln Glu Met
        35   40   45

Xaa Gly Xaa Leu Lys
     50

<210> 493
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 493
Pro Gly Phe Phe Phe Gln Met Leu Val His Thr Tyr Ser Ser Met Asp
 1   5   10   15

Arg His Asp Gly Val Pro Ser His Ser Ser Arg Leu Ser Gln Leu Gly
            20   25   30

Ser Val Ser Gln Gly Pro Tyr Ser Ser Ala Pro Pro Leu Ser His Thr
            35   40   45

Pro Ser Ser Asp Phe Gln Pro Pro Tyr Phe Pro Xaa Pro Tyr Gln Pro
        50   55   60

Leu Pro Xaa Xaa Gln Ser Gln Asp Pro Tyr Ser His Val Xaa Xaa Pro
65   70   75   80

Tyr Pro

<210> 494
<211> 290
<212> PRT
<213> Homo sapiens

<400> 494
Tyr Lys Asp Trp Leu Thr Lys Met Ser Gly Lys His Asp Val Gly Ala
 1   5   10   15

Tyr Met Leu Met Tyr Lys Gly Ala Asn Arg Thr Glu Thr Val Thr Ser
            20   25   30

Phe Arg Lys Arg Glu Ser Lys Val Pro Ala Asp Leu Leu Lys Arg Ala
            35   40   45

Phe Val Arg Met Ser Thr Ser Pro Glu Ala Phe Leu Ala Leu Arg Ser
        50   55   60

His Phe Ala Ser Ser His Ala Leu Ile Cys Ile Ser His Trp Ile Leu
65   70   75   80

Gly Ile Gly Asp Arg His Leu Asn Asn Phe Met Val Ala Met Glu Thr
            85   90   95

Gly Gly Val Ile Gly Ile Asp Phe Gly His Ala Phe Gly Ser Ala Thr
            100   105   110

Gln Phe Leu Pro Val Pro Glu Leu Met Pro Phe Arg Leu Thr Arg Gln
        115   120   125

```
Phe Ile Asn Leu Met Leu Pro Met Lys Glu Thr Gly Leu Met Tyr Ser
    130                 135                 140

Ile Met Val His Ala Leu Arg Ala Phe Arg Ser Asp Pro Gly Leu Leu
145                 150                 155                 160

Thr Asn Thr Met Asp Val Phe Val Lys Glu Pro Ser Phe Asp Trp Lys
                165                 170                 175

Asn Phe Glu Gln Lys Met Leu Lys Lys Gly Gly Ser Trp Ile Gln Glu
            180                 185                 190

Ile Asn Val Ala Glu Lys Asn Trp Tyr Pro Arg Gln Lys Ile Cys Tyr
        195                 200                 205

Ala Lys Arg Lys Leu Ala Gly Ala Asn Pro Ala Val Ile Thr Cys Asp
    210                 215                 220

Glu Leu Leu Leu Gly His Glu Lys Ala Pro Ala Phe Arg Asp Tyr Val
225                 230                 235                 240

Ala Val Ala Arg Gly Ser Lys Asp His Asn Ile Arg Ala Gln Glu Pro
            245                 250                 255

Glu Ser Gly Leu Ser Glu Glu Thr Gln Val Lys Cys Leu Met Asp Gln
            260                 265                 270

Ala Thr Asp Pro Asn Ile Leu Gly Arg Thr Trp Glu Gly Trp Glu Pro
    275                 280                 285

Trp Met
290
```

```
<210> 495
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 495
Cys Gln Ser His Pro Leu Pro Gly Gly Pro Ala Cys Pro Cys Leu Ala
1               5                   10                  15

Cys His Ile Thr Leu Leu Phe Gly Arg Pro Trp Leu Ile Lys Glu Val
```

447

```
                    20                  25                  30

Leu Val Val Ser Gln Ala Lys Trp Asn Leu Glu Thr Val Lys Lys Val
        35                  40                  45

Gln Ile Thr Leu Asn Cys Ile Gln Glu Val His Phe Phe Pro Ile Val
        50                  55                  60

Arg Gly Ser Trp Ser Leu Arg Asp Ala Arg Leu Glu Ser Asp Tyr Ile
65                  70                  75                  80

Ile Ile Gln Asn Gly Asn Ser Gln Gly Asn Ala Phe Phe His Phe Ile
                85                  90                  95

Arg Phe Phe Tyr Pro His Cys Thr Pro Ser Pro Ser Pro Leu Pro Ile
            100                 105                 110

Trp Met Ala Ser Gln Lys Leu Gly Pro Ser Pro Pro Cys Leu Gly Gly
        115                 120                 125

Gly Gln Ser Pro Leu Thr Ala Glu Ala Ala Leu Leu Ser Ser Ala Val
    130                 135                 140

Leu Pro Leu Xaa Lys Cys Leu Gln Arg Val Met Ser
145                 150                 155
```

```
<210> 496
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 496
Glu Glu Leu Leu Arg Ala Gln Glu Ala Pro Gly Gln Ala Glu Pro Pro
 1               5                  10                  15

Ala Ala Ala Glu Val Gln Gly Ala Gly Asn Glu Asn Glu Pro Arg Glu
            20                  25                  30

Ala Asp Lys Ser His Pro Glu Gln Arg Xaa Leu Arg Pro Arg Leu Cys
        35                  40                  45

Thr Met Lys Lys Gly Pro Ser Gly Tyr Gly Phe Asn Leu His Ser Asp
        50                  55                  60
```

```
Lys Ser Lys Pro Gly Gln Phe Ile Arg Ser Val Asp Pro Asp Ser Pro
65              70              75                  80

Ala Glu Ala Ser Gly Leu Arg Ala Gln Asp Arg Ile Val Glu Val Asn
                85              90              95

Gly Val Cys Met Glu Gly Lys Gln His Gly Asp Val Val Ser Ala Ile
            100             105             110

Arg Ala Gly Gly Asp Glu Thr Lys Leu Leu Val Val Asp Arg Glu Thr
        115             120             125

Asp Glu Phe Phe Lys Lys Cys Arg Val Ile Pro Ser Gln Glu His Leu
    130             135             140

Asn Gly Pro Leu Pro Val Pro Phe Thr Asn Gly Glu Ile Gln Lys Glu
145             150             155             160

Asn Ser Arg Glu Ala Leu Ala Glu Ala Ala Leu Glu Ser Pro Arg Pro
            165             170             175

Ala Leu Val Arg Ser Ala Ser Ser Asp Thr Ser Glu Glu Leu Asn Ser
        180             185             190

Gln Asp Ser Pro Pro Lys Gln Asp Ser Thr Ala Pro Ser Ser Thr Ser
        195             200             205

Ser Ser Asp Pro Ile Leu Asp Phe Asn Ile Ser Leu Ala Met Ala Lys
    210             215             220

Glu Arg Ala His Gln Lys Arg Ser Ser Lys Arg Ala Pro Gln Met Asp
225             230             235             240

Trp Ser Lys Lys Asn Glu Leu Phe Ser Asn Leu
            245             250
```

<210> 497
<211> 48
<212> PRT
<213> Homo sapiens

<400> 497
```
Asn Gly Ala Glu Ala Val Ser Thr Glu Ala Lys Met Thr Ala Phe Pro
1               5               10              15

Asp Trp Pro Trp Leu Phe His Thr Leu Cys Asp Pro Cys Pro Met Thr
            20              25              30

Leu Trp Leu Thr Leu Pro Glu Ala Met Thr Thr Ala Ala Phe Cys His
```

449

35   40   45

<210> 498
<211> 373
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (337)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (372)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 498
Gly Thr Arg Gly Ser Arg Ala Ser Gly Val Cys Ala Arg Gly Cys Leu
 1   5   10   15

Asp Ser Ala Gly Pro Trp Thr Met Ser Arg Ala Leu Arg Pro Pro Leu
            20   25   30

Pro Pro Leu Cys Phe Phe Leu Leu Leu Leu Ala Ala Ala Gly Ala Arg
            35   40   45

Ala Gly Gly Tyr Glu Thr Cys Pro Thr Val Gln Pro Asn Met Leu Asn
        50   55   60

Val His Leu Leu Pro His Thr His Asp Asp Val Gly Trp Leu Lys Thr
65   70   75   80

Val Asp Gln Tyr Phe Tyr Gly Ile Lys Asn Asp Ile Gln His Ala Gly
                85   90   95

Val Gln Tyr Ile Leu Asp Ser Val Ile Ser Ala Leu Leu Ala Asp Pro
            100   105   110

Thr Arg Arg Phe Ile Tyr Val Glu Ile Ala Phe Phe Ser Arg Trp Trp
        115   120   125

His Gln Gln Thr Asn Ala Thr Gln Glu Val Val Arg Asp Leu Val Arg
    130   135   140

Gln Gly Arg Leu Glu Phe Ala Asn Gly Gly Trp Val Met Asn Asp Glu

```
145                 150                 155                 160


Ala Ala Thr His Tyr Gly Ala Ile Val Asp Gln Met Thr Leu Gly Leu
            165                 170                 175


Arg Phe Leu Glu Asp Thr Phe Gly Asn Asp Gly Arg Pro Arg Val Ala
            180                 185                 190


Trp His Ile Asp Pro Phe Gly His Ser Arg Glu Gln Ala Ser Leu Phe
            195                 200                 205


Ala Gln Met Gly Phe Asp Gly Phe Phe Phe Gly Arg Leu Asp Tyr Gln
    210                 215                 220


Asp Lys Trp Val Arg Met Gln Lys Leu Glu Met Glu Gln Val Trp Arg
225                 230                 235                 240


Ala Ser Thr Ser Leu Lys Pro Pro Thr Ala Asp Leu Phe Thr Gly Val
            245                 250                 255


Leu Pro Asn Gly Tyr Asn Pro Pro Arg Asn Leu Cys Trp Asp Val Leu
            260                 265                 270


Cys Val Asp Gln Pro Leu Val Glu Asp Pro Arg Ser Pro Glu Tyr Asn
            275                 280                 285


Ala Lys Glu Leu Val Asp Tyr Phe Leu Asn Val Ala Thr Ala Gln Gly
    290                 295                 300


Arg Tyr Tyr Arg Thr Asn His Thr Val Met Thr Met Gly Ser Asp Phe
305                 310                 315                 320


Gln Tyr Glu Asn Ala Asn Met Trp Phe Lys Asn Leu Asp Lys Leu Ile
            325                 330                 335


Xaa Leu Val Asn Ala Gln Gly Lys Arg Lys Gln Cys Pro Cys Ser Leu
            340                 345                 350


Leu His Pro Arg Leu Leu Pro Leu Gly Ala Glu Gln Gly Gln Pro His
        355                 360                 365


Leu Val Ser Xaa Thr
    370
```

<400> 499
Ala Leu Pro Gly Pro Asp Trp His Gly Ala Gly Ala Ala Asp Arg Gly
1   5   10   15

Pro Ala Ala Pro Pro Arg Pro Gly Pro Cys Ala Tyr Ala Ala His Gly
                20   25   30

Arg Gly Ala Leu Ala Glu Ala Ala Arg Arg Cys Leu His Asp Ile Ala
            35   40   45

Leu Ala His Arg Ala Ala Thr Ala Ala Arg Pro Pro Ala Pro Pro Pro
        50   55   60

Ala Pro Gln Pro Pro Ser Pro Thr Pro Ser Pro Pro Arg Pro Thr Leu
65   70   75   80

Ala Arg Glu Asp Asn Glu Glu Asp Glu Asp Glu Pro Thr Glu Thr Glu
                85   90   95

Thr Ser Gly Glu Gln Leu Gly Ile Ser Asp Asn Gly Gly Leu Phe Val
            100   105   110

Met Asp Glu Asp Ala Thr Leu Gln Asp Leu Pro Pro Phe Cys Glu Ser
        115   120   125

Asp Pro Glu Ser Thr Asp Asp Gly Ser Leu Ser Glu Glu Thr Pro Ala
        130   135   140

Gly Pro Pro Thr Cys Ser Val Pro Pro Ala Ser Ala Leu Pro Thr Gln
145   150   155   160

Gln Tyr Ala Lys Ser Leu Pro Val Ser Val Pro Val Trp Gly Phe Lys
                165   170   175

Glu Lys Arg Thr Glu Ala Arg Ser Ser Asp Glu Glu Asn Gly Pro Pro
            180   185   190

Ser Ser Pro Asp Leu Asp Arg Ile Ala Ala Ser Met Arg Ala Leu Val
        195   200   205

Leu Arg Glu Ala Glu Asp Thr Gln Val Phe Gly Asp Leu Pro Arg Pro
        210   215   220

Arg Leu Asn Thr Ser Asp Phe Gln Lys Leu Lys Arg Lys Tyr
225   230   235

<210> 500
<211> 198
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 500
Asn Ser Ala Glu Leu Ser Pro Gly Leu Cys Ser Pro Thr Pro Thr Glu
 1   5   10   15

Ala Arg Ala Gly Asp Ala Gly Pro Ala Ala Arg Ser Arg Lys Gln Asn
            20   25   30

Pro Gln Ser Pro Pro Cys Cys Cys Val Asp Asp Thr Trp Ala Gln Ala
        35   40   45

Glu Val Gly Pro Val Thr Ser Cys Thr Gly Phe Val Glu Gly Ser Ser
    50   55   60

Arg Thr Gly Gly Met Gly Ser Ala Cys Ile Lys Val Thr Lys Tyr Phe
65   70   75   80

Leu Phe Leu Phe Asn Leu Ile Phe Phe Ile Leu Gly Ala Xaa Ile Leu
                85   90   95

Gly Phe Gly Val Trp Ile Leu Ala Asp Lys Ser Ser Phe Ile Ser Val
            100   105   110

Leu Gln Thr Ser Ser Ser Ser Leu Arg Met Gly Ala Tyr Val Phe Ile
        115   120   125

Gly Val Gly Ala Val Thr Met Leu Met Gly Phe Leu Gly Cys Ile Gly
    130   135   140

Ala Val Asn Glu Val Arg Cys Leu Leu Gly Leu Xaa Phe Ala Phe Leu
145   150   155   160

Leu Leu Ile Leu Ile Ala Gln Val Thr Ala Gly Ala Leu Phe Tyr Phe
                165   170   175

Asn Met Gly Lys Val Ser Pro Ser Leu Pro Pro Ser Ser Leu Gly Trp
            180   185   190

Thr Asn His Gly Gly Asp
        195

453

```
<210> 501
<211> 169
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 501
Ser Ser Ala Ser Thr Asn Met Ser Arg Gly Ser Ser Ala Gly Phe Asp
 1               5                  10                  15

Arg His Ile Thr Ile Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu
                20                  25                  30

Tyr Ala Phe Lys Ala Ile Asn Gln Gly Gly Leu Thr Ser Val Ala Val
            35                  40                  45

Arg Gly Lys Asp Cys Ala Val Ile Val Thr Gln Lys Lys Val Pro Asp
        50                  55                  60

Lys Leu Leu Asp Ser Ser Thr Val Thr His Leu Phe Lys Ile Thr Glu
65                  70                  75                  80

Asn Ile Gly Cys Val Met Thr Gly Met Thr Ala Asp Ser Arg Ser Gln
                85                  90                  95

Val Gln Arg Ala Arg Tyr Glu Ala Ala Asn Trp Lys Tyr Lys Tyr Gly
                100                 105                 110

Tyr Glu Ile Pro Val Asp Met Leu Cys Lys Arg Ile Ala Asp Ile Ser
            115                 120                 125

Gln Val Tyr Thr Gln Asn Ala Glu Met Arg Pro Leu Gly Cys Cys Met
        130                 135                 140

Ile Leu Ile Gly Ile Asp Glu Glu Gln Gly Pro Gln Val Tyr Lys Cys
145                 150                 155                 160

Asp Pro Ala Gly Xaa Tyr Cys Gly Val
                165


<210> 502
<211> 507
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```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (361)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (461)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 502
Val Arg Gln Leu Cys Arg Pro Ala Glu Xaa Asp Ser Val Met Ala Glu
 1               5                  10                  15

Gln Val Ala Leu Ser Arg Thr Gln Val Cys Gly Ile Leu Arg Glu Glu
              20                  25                  30

Leu Phe Gln Gly Asp Ala Phe His Gln Ser Asp Thr His Ile Phe Ile
         35                  40                  45

Ile Met Gly Ala Ser Gly Asp Leu Ala Lys Lys Lys Ile Tyr Pro Thr
     50                  55                  60

Ile Trp Trp Leu Phe Arg Asp Gly Leu Leu Pro Glu Asn Thr Phe Ile
 65                  70                  75                  80

Val Gly Tyr Ala Arg Ser Arg Leu Thr Val Ala Asp Ile Arg Lys Gln
              85                  90                  95

Ser Glu Pro Phe Phe Lys Ala Thr Pro Glu Glu Lys Leu Lys Leu Glu
             100                 105                 110

Asp Phe Phe Ala Arg Asn Ser Tyr Val Ala Gly Gln Tyr Asp Asp Ala
         115                 120                 125

Ala Ser Tyr Gln Arg Leu Asn Ser His Met Asn Ala Leu His Leu Gly
    130                 135                 140

Ser Gln Ala Asn Arg Leu Phe Tyr Leu Ala Leu Pro Pro Thr Val Tyr
145                 150                 155                 160

Glu Ala Val Thr Lys Asn Ile His Glu Ser Cys Met Ser Gln Ile Gly
             165                 170                 175
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455

Trp Asn Arg Ile Ile Val Glu Lys Pro Phe Gly Arg Asp Leu Gln Ser
          180   185   190

Ser Asp Arg Leu Ser Asn His Ile Ser Ser Leu Phe Arg Glu Asp Gln
          195   200   205

Ile Tyr Arg Ile Asp His Tyr Leu Gly Lys Glu Met Val Gln Asn Leu
          210   215   220

Met Val Leu Arg Phe Ala Asn Arg Ile Phe Gly Pro Ile Trp Asn Arg
225   230   235   240

Asp Asn Ile Ala Cys Val Ile Leu Thr Phe Lys Glu Pro Phe Gly Thr
              245   250   255

Glu Gly Arg Gly Gly Tyr Phe Asp Glu Phe Gly Ile Ile Arg Asp Val
          260   265   270

Met Gln Asn His Leu Leu Gln Met Leu Cys Leu Val Ala Met Glu Lys
          275   280   285

Pro Ala Ser Thr Asn Ser Asp Asp Val Arg Asp Glu Lys Val Lys Val
          290   295   300

Leu Lys Cys Ile Ser Glu Val Gln Ala Asn Asn Val Val Leu Gly Gln
305   310   315   320

Tyr Val Gly Asn Pro Asp Gly Glu Gly Glu Ala Thr Lys Gly Tyr Leu
              325   330   335

Asp Asp Pro Thr Val Pro Arg Gly Ser Thr Thr Ala Thr Phe Ala Ala
          340   345   350

Val Val Leu Tyr Val Glu Asn Glu Xaa Trp Asp Gly Val Pro Phe Ile
          355   360   365

Leu Arg Cys Gly Lys Ala Leu Asn Glu Arg Lys Ala Glu Val Arg Leu
          370   375   380

Gln Phe His Asp Val Ala Gly Asp Ile Phe His Gln Gln Cys Lys Arg
385   390   395   400

Asn Glu Leu Val Ile Arg Val Gln Pro Asn Glu Ala Val Tyr Thr Lys
              405   410   415

Met Met Thr Lys Lys Pro Gly Met Phe Phe Asn Pro Glu Glu Ser Glu
          420   425   430

Leu Asp Leu Thr Tyr Gly Asn Arg Tyr Lys Asn Val Lys Leu Pro Asp
          435   440   445

```
Ala Tyr Glu Arg Leu Ile Leu Asp Val Phe Cys Gly Xaa Gln Met His
    450             455             460

Phe Val Arg Arg Thr Ser Ser Val Arg Pro Gly Val Phe Ser Pro His
465             470             475             480

Cys Cys Thr Arg Leu Ser Trp Arg Ser Pro Ser Pro Ser Pro Ile Phe
            485             490             495

Met Ala Ala Glu Ala Pro Arg Arg Gln Thr Ser
            500             505
```

```
<210> 503
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 503
Gly Pro Glu Val Leu Pro Glu Pro Arg Val Pro Arg Glu Ala Leu Ala
    1               5               10              15

Phe Ile Ile Arg Ser Phe Gly Gly Glu Val Ser Trp Asp Lys Ser Leu
            20              25              30

Cys Ile Gly Ala Thr Tyr Asp Val Thr Asp Ser Arg Ile Thr His Gln
            35              40              45

Ile Val Asp Arg Pro Gly Gln Gln Thr Ser Val Ile Gly Arg Cys Tyr
    50              55              60

Val Gln Pro Gln Xaa Val Phe Asp Ser Val Asn Ala Arg Leu Leu Leu
65              70              75              80

Pro Val Ala Glu Tyr Phe Ser Gly Val Gln Leu Pro Pro His Leu Ser
            85              90              95

Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr Val Pro Pro Glu Lys Leu
            100             105             110

Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp Pro Gly Asn Leu Asn Glu
            115             120             125

Ser Glu Glu Glu Glu Glu Glu Asp Asp Asn Asn Glu Gly Asp Gly Asp
```

```
            130                  135                  140

Glu Glu Gly Glu Asn Glu Glu Glu Glu Glu Asp Ala Glu Ala Gly Ser
145                  150                  155                  160

Glu Lys Glu Glu Glu Ala Arg Leu Ala Ala Leu Glu Glu Gln Arg Met
              165                  170                  175

Glu Gly Lys Lys Pro Arg Val Met Ala Gly Thr Leu Lys Leu Glu Asp
              180                  185                  190

Lys Gln Arg Leu Ala Gln Glu Glu Glu Ser Glu Ala Lys Arg Leu Ala
          195                  200                  205

Ile Met Met Met Lys Lys Arg Glu Lys Tyr Leu Tyr Gln Lys Ile Met
          210                  215                  220

Phe Gly Lys Arg Arg Lys Ile Arg Glu Ala Asn Lys Leu Ala Glu Lys
225                  230                  235                  240

Arg Lys Ala His Asp Glu Ala Val Arg Ser Glu Lys Lys Ala Lys Lys
              245                  250                  255

Ala Arg Pro Glu
          260
```

<210> 504
<211> 424
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (292)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (342)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 504

```
Leu Leu Gln Arg Cys Tyr Ala Phe Pro Gly His Arg Leu Ala His Ser
1                 5                  10                  15

Gly Ser Asp Leu Ser Leu Leu Val Pro Glu Ile Glu Asp Met Tyr Ser
              20                  25                  30

Ser Pro Tyr Leu Arg Pro Ser Glu Ser Pro Ile Thr Val Glu Val Asn
```

458

```
           35                    40                    45

Cys Thr Asn Pro Gly Thr Arg Tyr Cys Trp Met Ser Thr Gly Leu Tyr
    50                    55                    60

Ile Pro Gly Arg Gln Ile Ile Glu Val Ser Leu Pro Glu Ala Ala Ala
65                    70                    75                    80

Ser Ala Asp Leu Lys Ile Gln Ile Gly Cys His Thr Asp Asp Leu Thr
                85                    90                    95

Arg Ala Ser Lys Leu Phe Arg Gly Pro Leu Val Ile Asn Arg Cys Cys
            100                   105                   110

Leu Asp Lys Pro Thr Lys Ser Ile Thr Cys Leu Trp Gly Gly Leu Leu
        115                   120                   125

Tyr Ile Ile Val Pro Gln Asn Ser Lys Leu Gly Ser Val Pro Val Thr
    130                   135                   140

Val Lys Gly Ala Val His Ala Pro Tyr Tyr Lys Leu Gly Glu Thr Thr
145                   150                   155                   160

Leu Glu Glu Trp Lys Arg Arg Ile Gln Glu Asn Pro Gly Pro Trp Gly
                165                   170                   175

Glu Leu Ala Thr Asp Asn Ile Ile Leu Thr Val Pro Thr Ala Asn Leu
            180                   185                   190

Arg Thr Leu Glu Asn Pro Glu Pro Leu Leu Arg Leu Trp Asp Glu Val
        195                   200                   205

Met Gln Ala Val Ala Arg Leu Gly Ala Glu Pro Phe Pro Leu Arg Leu
    210                   215                   220

Pro Gln Arg Ile Val Ala Asp Val Gln Ile Ser Val Gly Trp Met His
225                   230                   235                   240

Ala Gly Tyr Pro Ile Met Cys His Leu Glu Ser Val Gln Glu Leu Ile
                245                   250                   255

Asn Glu Lys Leu Ile Arg Thr Lys Gly Leu Trp Gly Pro Val His Glu
            260                   265                   270

Leu Gly Arg Asn Gln Gln Arg Gln Glu Trp Glu Phe Pro Pro His Thr
        275                   280                   285

Thr Glu Ala Xaa Cys Asn Leu Trp Cys Val Tyr Val His Glu Thr Val
    290                   295                   300

Leu Gly Ile Pro Arg Ser Arg Ala Asn Ile Ala Leu Trp Pro Pro Val
```

```
              305                 310                 315                 320

         Arg Glu Lys Arg Val Arg Ile Tyr Leu Ser Lys Gly Pro Asn Val Lys
                     325                 330                 335

         Asn Trp Asn Ala Trp Xaa Ala Leu Glu Thr Tyr Leu Gln Leu Gln Glu
                     340                 345                 350

         Ala Phe Gly Trp Glu Pro Phe Ile Arg Leu Phe Thr Glu Tyr Arg Asn
                     355                 360                 365

         Gln Thr Asn Leu Pro Thr Glu Asn Val Asp Lys Met Asn Leu Trp Val
                 370                 375                 380

         Lys Met Phe Ser His Gln Val Gln Lys Asn Leu Ala Pro Phe Phe Glu
         385                 390                 395                 400

         Ala Trp Ala Gly Pro Ser Arg Arg Lys Trp Leu Pro Ala Trp Pro Ile
                     405                 410                 415

         Cys Leu Asn Gly Arg Lys Ile Leu
                     420
```

```
<210> 505
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 505
```

```
Leu His Gln Ser Leu Leu His Leu Glu Lys Thr Asn Glu Arg Lys Ser
 1               5               10                  15

Ile Phe Leu Ile His Tyr Pro Asn Asn Asn Arg Thr Pro Tyr Arg Asn
            20              25              30

Tyr Tyr His Tyr Val Ser Lys His Tyr Ile Pro Ile Thr Tyr Pro Thr
        35              40              45

Xaa Ser Ile Ile Asp Xaa Ile Ser Ile Pro Thr Met Ile Ser Ala Leu
    50              55              60

Asn Xaa Gln Asn Lys Xaa
65                  70
```

<210> 506
<211> 434
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (363)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 506
```
Ser Thr His Ala Ser Ala His Ala Ser Val Ser Thr Ala Ala Ala Ala
 1               5               10                  15

Ala Leu Ala Ala Ala Ala Val Lys Ala Lys His Leu Ala Ala Val Glu
            20              25              30

Glu Arg Lys Ile Lys Ser Leu Val Ala Leu Leu Val Glu Thr Gln Met
        35              40              45

Lys Lys Leu Glu Ile Lys Leu Arg His Phe Glu Glu Leu Glu Thr Ile
    50              55              60

Met Asp Arg Glu Xaa Glu Ala Leu Glu Tyr Gln Arg Gln Gln Leu Leu
```

```
        65                      70                      75                      80

 Ala Asp Arg Gln Ala Phe His Met Glu Gln Leu Lys Tyr Ala Glu Met
                 85                      90                      95

 Arg Ala Arg Gln Gln His Phe Gln Gln Met His Gln Gln Gln Gln Gln
                 100                     105                     110

 Pro Pro Pro Ala Leu Pro Pro Gly Ser Gln Pro Ile Pro Pro Thr Gly
             115                     120                     125

 Ala Ala Gly Pro Pro Ala Xaa His Gly Leu Ala Val Ala Pro Ala Ser
             130                     135                     140

 Val Val Pro Ala Pro Ala Gly Ser Gly Ala Pro Pro Gly Ser Leu Gly
 145                     150                     155                     160

 Pro Ser Glu Gln Ile Gly Gln Ala Gly Ser Thr Ala Gly Pro Gln Gln
                 165                     170                     175

 Gln Gln Pro Ala Gly Ala Pro Gln Pro Gly Ala Val Pro Pro Gly Val
             180                     185                     190

 Pro Pro Pro Gly Pro His Gly Pro Ser Pro Phe Pro Asn Gln Gln Thr
             195                     200                     205

 Pro Pro Ser Met Met Pro Gly Ala Val Pro Gly Ser Gly His Pro Gly
             210                     215                     220

 Val Ala Gly Asn Ala Pro Leu Gly Leu Pro Phe Gly Met Pro Pro Pro
 225                     230                     235                     240

 Pro Pro Pro Pro Ala Pro Ser Ile Ile Pro Phe Gly Ser Leu Ala Asp
             245                     250                     255

 Ser Ile Ser Ile Asn Leu Pro Ala Pro Pro Asn Leu His Gly His His
             260                     265                     270

 His His Leu Pro Phe Ala Pro Gly Thr Leu Pro Pro Pro Asn Leu Pro
             275                     280                     285

 Val Ser Met Ala Asn Pro Leu His Pro Asn Leu Pro Ala Thr Thr Thr
             290                     295                     300

 Met Pro Ser Ser Leu Pro Leu Gly Pro Gly Leu Gly Ser Ala Ala Ala
 305                     310                     315                     320

 Gln Ser Pro Ala Ile Val Ala Ala Val Gln Gly Asn Leu Leu Pro Ser
             325                     330                     335

 Ala Ser Pro Leu Pro Asp Pro Gly Thr Pro Leu Pro Pro Asp Pro Thr
```

```
                  340                 345                 350

Ala Pro Ser Pro Arg His Gly His Pro Cys Xaa His Leu His Ser Glu
        355                 360                 365

Glu Pro Ala Arg His Leu Ser Pro Ser Pro Pro Val Asp Ile Thr Val
        370                 375                 380

Pro Gly Thr Ala Leu Pro Pro Pro Leu Gly Pro Ser Pro Ala Trp Arg
385                 390                 395                 400

Val His His Tyr Val Arg Lys Ala Pro Ser Ala Pro Pro Lys Pro Ser
                405                 410                 415

Pro Cys Leu Thr Glu Ala Cys Ile Phe Ile Ser Asp Tyr Ser Arg Thr
            420                 425                 430

Ser Val
```

```
<210> 507
<211> 303
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (280)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 507
Glu Tyr Val Phe Pro Ala Lys Lys Lys Leu Gln Glu Tyr Arg Val Leu
  1               5                  10                  15

Ile Thr Thr Leu Ile Thr Ala Gly Ser Trp Ser Arg Pro Ser Phe Pro
                20                  25                  30

Leu Ile Thr Ser His Thr Ser Ser Ser Met Arg Leu Ala Thr Ala Trp
            35                  40                  45

Ser Leu Arg Ser Leu Val Ala Ile Ala Gly Leu Met Glu Val Lys Glu
        50                  55                  60

Thr Gly Asp Pro Gly Gly Gln Leu Val Leu Ala Gly Asp Pro Arg Gln
```

```
        65                       70                      75                        80

    Leu Gly Pro Val Leu Arg Ser Pro Leu Thr Gln Lys His Gly Leu Gly
                    85                      90                      95

    Tyr Ser Leu Leu Glu Arg Leu Leu Thr Tyr Asn Ser Leu Tyr Lys Lys
                    100                     105                     110

    Gly Pro Asp Gly Tyr Asp Pro Gln Phe Ile Thr Lys Leu Leu Arg Asn
                    115                     120                     125

    Tyr Arg Ser His Pro Thr Ile Leu Asp Ile Pro Asn Gln Leu Tyr Tyr
            130                     135                     140

    Glu Gly Glu Leu Gln Ala Cys Ala Asp Val Val Asp Arg Glu Arg Phe
    145                     150                     155                     160

    Cys Arg Trp Ala Xaa Leu Pro Arg Gln Gly Phe Pro Ile Ile Phe His
                    165                     170                     175

    Gly Val Met Gly Lys Asp Glu Arg Glu Gly Asn Ser Pro Ser Phe Phe
                    180                     185                     190

    Asn Pro Glu Glu Ala Ala Thr Val Thr Ser Tyr Leu Lys Leu Leu Leu
                    195                     200                     205

    Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg Leu Ser Pro Arg Ser Val
            210                     215                     220

    Gly Val Ile Ser Pro Tyr Arg Lys Gln Val Glu Lys Ile Arg Tyr Cys
    225                     230                     235                     240

    Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly Leu Asp Asp Ile Lys Asp
                    245                     250                     255

    Leu Lys Val Gly Ser Val Glu Glu Phe Gln Gly Gln Glu Arg Ser Val
                    260                     265                     270

    Ile Leu Ile Ser Thr Val Arg Xaa Ala Arg Ala Leu Cys Ser Trp Ile
                    275                     280                     285

    Trp Thr Leu Ile Trp Val Ser Leu Arg Thr Pro Arg Gly Ser Met
            290                     295                     300
```

<210> 508
<211> 250
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 508
Glu Gln Tyr Leu Pro Leu Thr Glu Glu Glu Leu Glu Lys Glu Ala Xaa
 1               5                  10                  15


Lys Val Glu Gly Phe Asp Leu Val Gln Lys Pro Ser Tyr Tyr Val Arg
                20                  25                  30


Leu Gly Ser Leu Ser Thr Lys Leu His Ser Arg Ala Tyr Gln Gln Ala
            35                  40                  45


Leu Ser Arg Val Lys Glu Ala Lys Gln Lys Ser Gln Gln Thr Ile Ser
        50                  55                  60


Gln Leu His Ser Thr Val His Leu Ile Glu Phe Ala Arg Lys Asn Val
65                  70                  75                  80


Tyr Ser Ala Asn Gln Lys Ile Gln Asp Ala Gln Asp Lys Leu Tyr Leu
                85                  90                  95


Ser Trp Val Glu Trp Lys Arg Ser Ile Gly Tyr Asp Asp Thr Asp Glu
            100                 105                 110


Ser His Cys Ala Glu His Ile Glu Ser Arg Thr Leu Ala Ile Ala Arg
        115                 120                 125


Asn Leu Thr Gln Gln Leu Gln Thr Thr Cys His Thr Leu Leu Ser Asn
    130                 135                 140


Ile Gln Gly Val Pro Gln Asn Ile Gln Asp Gln Ala Lys His Met Gly
145                 150                 155                 160


Val Met Ala Gly Asp Ile Tyr Ser Val Phe Arg Asn Ala Ala Ser Phe
                165                 170                 175


Lys Glu Val Ser Asp Ser Leu Leu Thr Ser Ser Lys Gly Gln Leu Gln
            180                 185          ·        190


Lys Met Lys Glu Ser Leu Asp Asp Val Met Asp Tyr Leu Val Asn Asn
        195                 200                 205


Thr Pro Leu Asn Trp Leu Val Gly Pro Phe Tyr Pro Gln Leu Thr Glu
    210                 215                 220


Ser Gln Asn Ala Gln Asp Gln Gly Ala Glu Met Asp Lys Ser Ser Gln
225                 230                 235                 240
```

```
Glu Thr Gln Arg Ser Glu His Lys Thr His
                245                 250



<210> 509
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 509
His Glu Leu Trp Gly Cys Gly Pro Val Thr Pro Arg Arg Thr Ala Pro
 1               5                  10                  15

Ser Gly Trp Ala Gln Ala Pro Leu Ser Asp Thr Ala Gln Val Tyr Met
                20                  25                  30

Glu Leu Gln Gly Leu Val Asp Pro Gln Ile Gln Leu Pro Leu Leu Ala
            35                  40                  45

Ala Arg Ser Thr Ser Cys Arg Ser Ser Leu Ile Ala Ser Gln Pro Gly
        50                  55                  60

Pro His Gln Lys Gly Arg Gln Gly Leu Arg Gly Asn Lys Ser Phe Leu
65                  70                  75                  80

Pro Ser Ser Trp Asn Cys Gln Asn Trp Thr Arg Gln Pro Leu Thr Ser
                85                  90                  95

Xaa Ser



<210> 510
<211> 392
<212> PRT
<213> Homo sapiens

<400> 510
Gly Ala Met Arg Gly Asp Arg Gly Arg Gly Arg Gly Gly Arg Phe Gly
 1               5                  10                  15

Ser Arg Gly Gly Pro Gly Gly Gly Phe Arg Pro Phe Val Pro His Ile
                20                  25                  30
```

466

```
Pro Phe Asp Phe Tyr Leu Cys Glu Met Ala Phe Pro Arg Val Lys Pro
        35                  40                  45

Ala Pro Asp Glu Thr Ser Phe Ser Glu Ala Leu Leu Lys Arg Asn Gln
     50                  55                  60

Asp Leu Ala Pro Asn Ser Ala Glu Gln Ala Ser Ile Leu Ser Leu Val
65                  70                  75                      80

Thr Lys Ile Asn Asn Val Ile Asp Asn Leu Ile Val Ala Pro Gly Thr
                 85                  90                  95

Phe Glu Val Gln Ile Glu Glu Val Arg Gln Val Gly Ser Tyr Lys Lys
            100                 105                 110

Gly Thr Met Thr Thr Gly His Asn Val Ala Asp Leu Val Val Ile Leu
        115                 120                 125

Lys Ile Leu Pro Thr Leu Glu Ala Val Ala Ala Leu Gly Asn Lys Val
     130                 135                 140

Val Glu Ser Leu Arg Ala Gln Asp Pro Ser Glu Val Leu Thr Met Leu
145                 150                 155                 160

Thr Asn Glu Thr Gly Phe Glu Ile Ser Ser Ser Asp Ala Thr Val Lys
                 165                 170                 175

Ile Leu Ile Thr Thr Val Pro Pro Asn Leu Arg Lys Leu Asp Pro Glu
                 180                 185                 190

Leu His Leu Asp Ile Lys Val Leu Gln Ser Ala Leu Ala Ala Ile Arg
            195                 200                 205

His Ala Arg Trp Phe Glu Glu Asn Ala Ser Gln Ser Thr Val Lys Val
     210                 215                 220

Leu Ile Arg Leu Leu Lys Asp Leu Arg Ile Arg Phe Pro Gly Phe Glu
225                 230                 235                 240

Pro Leu Thr Pro Trp Ile Leu Asp Leu Leu Gly His Tyr Ala Val Met
                 245                 250                 255

Asn Asn Pro Thr Arg Gln Pro Leu Ala Leu Asn Val Ala Tyr Arg Arg
            260                 265                 270

Cys Leu Gln Ile Leu Ala Ala Gly Leu Phe Leu Pro Gly Ser Val Gly
        275                 280                 285

Ile Thr Asp Pro Cys Glu Ser Gly Asn Phe Arg Val His Thr Val Met
     290                 295                 300
```

467

```
Thr Leu Glu Gln Gln Asp Met Val Cys Tyr Thr Ala Gln Thr Leu Val
305             310             315             320

Arg Ile Leu Ser His Gly Gly Phe Arg Lys Ile Leu Gly Gln Glu Gly
                325             330             335

Asp Ala Ser Tyr Leu Ala Ser Glu Ile Ser Thr Trp Asp Gly Val Ile
            340             345             350

Val Thr Pro Ser Glu Lys Ala Tyr Glu Lys Pro Pro Glu Lys Lys Glu
        355             360             365

Gly Glu Glu Glu Glu Glu Asn Thr Glu Glu Pro Pro Gln Gly Glu Glu
    370             375             380

Glu Glu Ser Met Glu Thr Gln Glu
385             390
```

```
<210> 511
<211> 72
<212> PRT
<213> Homo sapiens

<400> 511
His Gly Gly Gly Lys Gly Arg Gln Val Gly Leu His Ser Val Gln Arg
 1               5              10              15

Pro Ala Arg Arg Glu Thr Ala Ala Ser Trp Gly Leu Cys Val Lys Ile
            20              25              30

Pro Asp Leu Gly Val Ala Phe Val Tyr Lys Met Gln Glu Gly Lys Pro
        35              40              45

Val Pro Asp Ser Ser Arg Gln His Ala Gln Leu Ser Gly Ser Pro Val
    50              55              60

Ser Gln Gly Leu Ser Leu Pro Leu
65              70
```

```
<210> 512
<211> 181
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 512
```
Gly Trp Cys Ser Cys Ala His Ser Ser Ala Trp Pro Gly Xaa Trp Gly
 1               5                  10                  15

Ala Ser Gly Ile Pro Gln Gln Ala Pro Met Thr Val Cys Asp Gln Ala
            20                  25                  30

Xaa Pro Val Thr Phe Leu Leu Leu His Leu Glu Gly Gly Asp Ile His
            35                  40                  45

Thr Val Ser His Leu Ser Ser Pro Pro Pro Gly Val Ala His Arg Met
        50                  55                  60

Gly Thr Gly Gly Ser Arg Asn Pro Asn Pro Ala Trp Leu Gly Gly Ala
65                  70                  75                  80

Leu Leu Val Arg Gly Arg Pro Ala Ser Leu Ala Pro Trp Gly His Ser
                85                  90                  95

Trp Lys Arg Gly Leu Ala His Ala Pro Leu Arg Ala Gly Thr Cys Thr
            100                 105                 110

Gly His Thr Arg His Ser Ala Cys Trp Asn Arg Trp Leu Cys Ser Cys
        115                 120                 125

Ser Gly Pro Arg Ala Ala Xaa Leu Arg Pro Cys Thr Ser His Met His
    130                 135                 140

Trp Thr Arg Ala Glu Thr Pro Val Cys Tyr Arg Ala Leu Val Leu Cys
145                 150                 155                 160

Gly Pro Gly Ala Thr Ala Gln Ser Ser Gln Trp Arg Ser Thr Pro Leu
                165                 170                 175

Asp Ser Ile Phe Phe
                180
```

469

```
<210> 513
<211> 202
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 513
Leu Gly Asp Thr Ile Glu Gly Thr Pro Ala Gly Thr Val Pro Xaa Phe
 1               5                  10                  15

Pro Gly Arg Pro Thr Arg Ala Ile Met Ala Gln Asp Gln Gly Glu Lys
             20                  25                  30

Glu Asn Pro Met Arg Glu Leu Arg Ile Arg Lys Leu Cys Leu Asn Ile
         35                  40                  45

Cys Val Gly Glu Ser Gly Asp Arg Leu Thr Arg Ala Ala Lys Val Leu
     50                  55                  60

Glu Gln Leu Thr Gly Gln Thr Pro Val Phe Ser Lys Ala Arg Tyr Thr
65                  70                  75                  80

Val Arg Ser Phe Gly Ile Arg Arg Asn Glu Lys Ile Ala Val His Cys
                 85                  90                  95

Thr Val Arg Gly Ala Lys Ala Glu Glu Ile Leu Glu Lys Gly Leu Lys
             100                 105                 110

Val Arg Glu Tyr Glu Leu Arg Lys Asn Asn Phe Ser Asp Thr Gly Asn
         115                 120                 125

Phe Gly Phe Gly Ile Gln Glu His Ile Asp Leu Gly Ile Lys Tyr Asp
     130                 135                 140

Pro Ser Ile Gly Ile Tyr Gly Leu Asp Phe Tyr Val Val Leu Gly Arg
145                 150                 155                 160

Pro Gly Phe Ser Ile Ala Asp Lys Lys Arg Arg Thr Gly Cys Ile Gly
             165                 170                 175

Ala Lys His Arg Ile Ser Lys Glu Glu Ala Met Arg Trp Phe Gln Gln
             180                 185                 190

Lys Tyr Asp Gly Ile Ile Leu Pro Gly Lys
             195                 200
```

```
<210> 514
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 514
Xaa Xaa Lys Asn Xaa Ile Thr Pro Lys Glu Glu Ser Pro Pro His Xaa
 1               5                  10                  15

Ala Leu Leu Ser Lys Cys Leu Leu Thr Pro Ser Pro Lys Met Pro Pro
            20                  25                  30

Ile Leu Xaa Val Met Ala Ala Leu Gly Phe Glu Arg Arg Glu Phe Gly
        35                  40                  45

Ser Thr Ser Val Glu Arg Val Gln Ser Arg Gln Leu Asp Cys Phe
    50                  55                  60


<210> 515
<211> 218
<212> PRT
<213> Homo sapiens
```

471

```
<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (209)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 515
Ser Leu Ala Arg Gly Cys Gln Arg Pro Asp Ala Val Leu Tyr Ala Arg
  1           5              10              15

His Tyr Asn Ile Pro Val Ile His Ala Phe Arg Arg Ala Val Asp Asp
            20              25              30

Pro Gly Leu Val Phe Asn Gln Leu Pro Lys Met Leu Tyr Pro Glu Tyr
        35              40              45

His Lys Val His Gln Met Met Arg Glu Gln Ser Ile Leu Ser Pro Ser
    50              55              60

Pro Tyr Glu Gly Tyr Arg Ser Leu Pro Arg His Gln Leu Leu Cys Phe
65              70              75              80

Lys Glu Asp Cys Gln Ala Val Phe Gln Asp Leu Glu Gly Val Glu Lys
            85              90              95

Val Phe Gly Val Ser Leu Val Leu Val Leu Ile Gly Ser His Pro Asp
        100             105             110

Leu Ser Phe Leu Pro Gly Ala Gly Ala Asp Phe Ala Val Asp Pro Asp
        115             120             125

Gln Pro Leu Ser Ala Lys Arg Asn Pro Ile Asp Val Asp Pro Phe Thr
    130             135             140

Tyr Gln Ser Thr Arg Gln Xaa Gly Leu Tyr Ala Met Gly Pro Leu Ala
145             150             155             160

Gly Asp Asn Phe Val Arg Phe Val Gln Gly Gly Ala Leu Ala Val Ala
            165             170             175

Ser Ser Leu Leu Arg Lys Glu Gln Asn His Leu His Arg Gln Pro Trp
        180             185             190
```

472

Ser Ser Leu Arg Gly Ile His Pro Leu Ile Asp Leu Lys Ser Gly Val
        195   200   205

Xaa Pro Xaa Leu Val Lys Leu Thr Ala Gln
    210   215

<210> 516
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 516
Asn Gly Arg Pro Asp Ser Thr Gly Pro Ala Ile Pro Gly Ile Leu Ser
 1   5   10   15

Trp Gly Phe Glu Thr Xaa Leu Arg Asp Arg Glu Thr Asp Pro Arg Asn
            20   25   30

Val Leu Asn Cys Asn Gly Pro His Thr
            35   40

<210> 517
<211> 250
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

473

```
<400> 517
Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val Tyr Gly Lys
 1               5                   10                  15

Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln Asp Arg Tyr
            20                  25                  30

Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val Ala Arg Val
        35                  40                  45

Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg Ala Pro Pro
    50                  55                  60

Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser Ala Val Asp
65                  70                  75                  80

Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp Thr Gln Ala
                85                  90                  95

Leu Pro Thr His Leu Ile Thr Cys Glu Ala Arg Ala Pro Arg Phe Pro
            100                 105                 110

Arg Arg Pro Leu Trp Xaa Pro Gly Pro Leu Pro Arg His Leu Thr Glu
        115                 120                 125

Gly Ala Thr Leu Trp Pro Pro Ala Ser Gln Ala Pro Ser Ser Ala Gln
    130                 135                 140

Ala Asp Ala Pro Arg Pro Gln Leu Trp Pro Pro Glu Leu Ser Pro Gly
145                 150                 155                 160

Xaa Pro Cys Leu Pro Leu Arg Ala Pro Glu Gly Gly Val Gly Asp Gly
            165                 170                 175

Gly Gln Gln Arg Pro Arg Gly Ala Gly Leu Gly Pro Ser Leu Gly Arg
            180                 185                 190

Pro His His Gln Gly Ser Ala Glu Pro Arg Arg Xaa His Arg Pro Pro
        195                 200                 205

Ala Ala Pro Arg Pro Arg Pro Ser Arg Leu Cys Cys Leu Asn Lys Arg
    210                 215                 220

Glu Arg Glu Pro Arg Arg Lys Gly Pro Gly Lys Lys Lys Lys Lys Lys
225                 230                 235                 240

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
            245                 250
```

```
<210> 518
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 518
Asn Pro Xaa Lys Lys Leu Xaa Ile Leu Ile Lys Trp Pro Pro Pro Phe
 1               5                  10                  15


Pro Pro Ser Phe Pro Pro Ser Pro Asn Ser Leu Ser Ser Ser Ser Phe
            20                  25                  30


Pro Pro Pro Leu Ser Leu Phe Ser Pro Ser Phe Thr Phe Leu Ile Ser
        35                  40                  45


Val Lys Leu Glu Arg Phe Glu Ile Pro Ile Lys Val Arg Leu Ser Pro
    50                  55                  60


Glu Pro Trp Thr Pro Glu Thr Gly Leu Val Thr Asp Ala Phe Lys Leu
65                  70                  75                  80


Lys Arg Lys Glu Leu Arg Asn His Tyr Leu Lys Asp Ile Glu Arg Met
                85                  90                  95


Tyr Gly Gly Lys
            100




<210> 519
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 519
His Glu Asp Gly Xaa Leu Met Gly Cys Arg His Arg Trp His Pro Arg
 1               5                  10                  15

Xaa Val Pro Phe His Gln Thr Ser Pro Lys Thr Glu Leu Glu Ser Thr
                 20                  25                  30

Ile Phe Gly Ser Pro Arg Leu Ala Ser Gly Leu Phe Pro Glu Trp Gln
             35                  40                  45

Ser Trp Gly Arg Met Glu Asn Leu Ala Ser Tyr Arg
         50                  55                  60



<210> 520
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 520
Ser His Pro Tyr Ala Pro Ser Cys Gly Leu Arg Gly Pro Gly Ala Ala
 1               5                  10                  15

Ser Arg Ala Arg Thr Arg Glu Arg Xaa Pro Gln Ala Glu Ala Glu Ala
                 20                  25                  30

Arg Ser Thr Pro Gly Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe
             35                  40                  45

Arg Gln Arg Phe Arg Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg
         50                  55                  60

Glu Ala Phe Arg Gln Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro
65                  70                  75                  80

Asp Ile Arg Thr Lys Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln
                 85                  90                  95

Leu Leu Ala Ile Leu Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg
                100                 105                 110

Arg Thr Asp Val Arg Ile Thr Gly
```

476

```
            115                      120


<210> 521
<211> 96
<212> PRT
<213> Homo sapiens

<400> 521
Gly His Gln Thr Val Ser Pro Ser Thr Gly Ser Arg Val Thr Arg Met
 1               5                  10                  15


Phe Ser Leu Ile Ser Phe Ser His Val Phe Ile Lys Asp Ile Cys Lys
               20                  25                  30


Leu Pro Lys Asp Glu Gly Thr Cys Arg Asp Phe Ile Leu Lys Trp Tyr
               35                  40                  45


Tyr Asp Pro Asn Thr Lys Ser Cys Ala Arg Phe Trp Tyr Gly Gly Cys
       50                  55                  60


Gly Gly Asn Glu Asn Lys Phe Gly Ser Gln Lys Glu Cys Glu Lys Val
65                  70                  75                  80


Cys Ala Pro Val Leu Ala Lys Pro Gly Val Ile Ser Val Met Gly Thr
               85                  90                  95


                    .


<210> 522
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 522
Asn Ser Gly Phe Arg Pro Lys Asn Pro Val Gly Arg Gly Gly Glu Pro
 1               5                  10                  15


Glu Xaa Cys Gly Gly Ala Gly Gly Leu Gly Cys Thr Leu Val Trp Gly
               20                  25                  30


Gly Thr Gly Ala Ala Val Val Thr Gly Val Val Trp Leu Leu Leu Pro
```

```
                     35                    40                    45

Asn Gly Gly Val Gly Val Gly Leu Leu Gly Pro Gln Ser Pro Val Gly
         50                    55                    60


Gly Ser Asp Ser Ala Pro Tyr Ser Leu His Pro Ala Gly Arg Thr Trp
 65                    70                    75                    80


Gly Leu Arg Ser Glu Cys Ile Pro Pro Leu Ser Phe Asn Leu Ser Cys
                 85                    90                    95


Arg Thr His Ser Gly Pro Gly Ala Arg Leu Gly Glu Ala Gly Pro Asn
             100                   105                   110


Tyr Gly Ser Arg Glu Leu Gln Val Pro Thr
             115                   120
```

<210> 523
<211> 94
<212> PRT
<213> Homo sapiens

<400> 523

```
Leu Ile Pro Gln Val Cys Cys Lys His Ser Met Glu Asp Thr Asp Asp
 1                   5                    10                   15


Ser Leu Val Leu Val Phe Leu Ser Ala Val Asn Val Gln Gln Phe Ala
                 20                    25                    30


Gln Glu Leu Gly Asp His Ile Cys Leu Ser Gly Gln Gly Ser Glu Val
             35                    40                    45


His Trp Asn Leu Leu Arg Asn Leu Phe Val Lys Thr Ile Val Asn Asn
         50                    55                    60


Tyr Cys Ile Phe Leu Gln Lys Tyr Ile Leu Glu Asn Cys Ile Leu Ser
 65                    70                    75                    80


Ile Lys Val Phe Leu Cys Lys Lys Lys Lys Lys Lys Leu Val
                 85                    90
```

<210> 524
<211> 93
<212> PRT
<213> Homo sapiens

<220>

478

```
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 524
Ser Ala Val Met Gly Arg Lys Lys Lys Gln Leu Lys Pro Trp Cys
 1               5               10               15


Trp Tyr Cys Asn Arg Asp Phe Asp Asp Glu Lys Ile Leu Ile Gln His
            20               25               30


Gln Lys Ala Lys His Phe Lys Cys His Ile Cys His Lys Lys Leu Tyr
            35               40               45


Thr Gly Pro Gly Leu Ala Ile His Cys Met Gln Val His Lys Glu Thr
        50               55               60


Ile Asp Ala Val Pro Asn Ala Tyr Leu Gly Glu Gln Thr Xaa Ile Gly
 65               70               75               80


Asn Ile Trp Tyr Gly Xaa Tyr Ser Arg Lys Arg Tyr Xaa
                85               90




<210> 525
<211> 324
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (323)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 525
Asp Leu Arg Leu Ser Arg Pro Glu Ala Val Glu Ala Glu Ala Met Met
 1               5               10               15


Ala Ala Met Ala Thr Ala Arg Val Arg Met Gly Pro Arg Cys Ala Gln
            20               25               30
```

```
Ala Leu Trp Arg Met Pro Trp Leu Pro Val Phe Leu Ser Leu Ala Ala
        35              40              45

Ala Ala Ala Ala Ala Ala Ala Glu Gln Gln Val Pro Leu Val Leu Trp
    50              55              60

Ser Ser Asp Arg Asp Leu Trp Ala Pro Ala Ala Asp Thr His Glu Gly
65              70              75              80

His Ile Thr Ser Asp Leu Gln Leu Ser Thr Tyr Leu Asp Pro Ala Leu
            85              90              95

Glu Leu Gly Pro Arg Asn Val Leu Leu Phe Leu Gln Asp Lys Leu Ser
        100             105             110

Ile Glu Asp Phe Thr Ala Tyr Gly Gly Val Phe Gly Asn Lys Gln Asp
        115             120             125

Ser Ala Phe Ser Asn Leu Glu Asn Ala Leu Asp Leu Ala Pro Ser Ser
    130             135             140

Leu Val Leu Pro Ala Val Asp Trp Tyr Ala Val Ser Thr Leu Thr Thr
145             150             155             160

Tyr Leu Gln Glu Lys Leu Gly Ala Ser Pro Leu His Val Asp Leu Ala
            165             170             175

Thr Leu Arg Glu Leu Lys Leu Asn Ala Ser Leu Pro Ala Leu Leu Leu
        180             185             190

Ile Arg Leu Pro Tyr Thr Ala Ser Ser Gly Leu Met Ala Pro Arg Glu
        195             200             205

Val Leu Thr Gly Asn Asp Glu Val Ile Gly Gln Val Leu Ser Thr Leu
    210             215             220

Lys Ser Glu Asp Val Pro Tyr Thr Ala Ala Leu Thr Ala Val Arg Pro
225             230             235             240

Ser Arg Val Ala Arg Asp Val Ala Val Val Ala Gly Gly Leu Gly Arg
            245             250             255

Gln Leu Leu Gln Lys Gln Pro Val Ser Pro Val Ile His Pro Pro Val
        260             265             270

Ser Tyr Asn Asp Thr Ala Pro Arg Ile Leu Phe Trp Ala Gln Asn Phe
    275             280             285

Ser Val Ala Tyr Lys Asp Gln Trp Glu Asp Leu Thr Pro Leu Thr Phe
    290             295             300
```

```
Gly Val Gln Glu Leu Asn Leu Thr Gly Ser Phe Trp Asn Asp Ser Phe
305             310             315             320

Ala Ser Xaa His
```

```
<210> 526
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 526
Phe Xaa Val Ser Trp Thr Trp Lys Gln Val Ser Glu Phe Pro Gly Asp
 1           5               10              15

Gln Arg Asp Glu Val Leu Gln Leu Pro Pro Ser Ser Cys Asn Leu Val
            20              25              30

Ser Ser Gly Ala Gly Gly Glu Pro Glu Lys Leu Ala Ser Tyr Ile Thr
        35              40              45

Ser Leu Trp Leu Phe Phe Ile Cys Lys Thr Arg Ile Ile Leu Asn Cys
    50              55              60

Lys Gly
 65
```

```
<210> 527
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 527
Asn Thr Gln Leu Trp Phe Leu Cys Phe Pro Asn Cys Lys Ala Ala Asp
 1           5               10              15
```

```
Asn Lys Thr Pro Gly Phe His Val Ser Ser Ala Met Ser Thr Leu Thr
            20              25              30

Gln Ile Leu Lys Gln Asn Ser Xaa Asn Ala Val Leu Arg Ile Gln Leu
        35              40              45

Leu Leu Lys Pro Ile Ser Ile Cys Ile Ile Thr Thr Asn Ile
    50              55              60
```

```
<210> 528
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 528
Tyr Asn Lys Ile Glu Ile Met His Leu Val Met Trp Pro Thr Ser Leu
 1               5              10              15

Leu Thr Thr Met Asp Cys Phe Gln Gln Gln Leu Ile Phe Trp Ser Val
            20              25              30

Leu Arg Gly Ala Cys Met Ser Phe Val Thr Ser Gly Ser Thr Pro Ala
        35              40              45

Val Lys Tyr Cys Phe His Leu Pro Leu Gln Lys Ala Ser Cys Leu Leu
    50              55              60

Thr Ser Thr Ala Lys Ala Leu Phe Trp Thr Gly Tyr Leu Ile Lys Xaa
65              70              75              80

Ile Ser Val Arg Leu Cys Ser Val Ile Pro Ser Glu Pro Arg Phe Val
            85              90              95

Ser Lys Ala Thr Val Leu Ser Xaa Xaa Pro Cys Val Trp Gly Gln Val
```

482

```
                    100                   105                   110

Ala Ile Pro Pro Met Ser Leu Val Ile Leu
        115                 120
```

```
<210> 529
<211> 182
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 529
Asp Arg Thr Arg Leu Ser Gln Ala Ser Thr Pro Thr Pro Val Cys Trp
 1               5                   10                  15

Gly Leu Leu Gln Pro Pro Pro Trp Xaa Glu Ala Trp Tyr Arg Leu Thr
            20                  25                  30

His Arg Gly Leu Cys Gln Val Arg Phe Cys Arg Trp Ser Gln Ala Leu
        35                  40                  45

Pro Glu Ala Arg Gly Gly Ala Trp Ala Gly Ser Pro Gly Glu Gly Gln
    50                  55                  60

Ala Gly Pro Arg Leu His Thr His Ile Gln Pro Ala Gly Leu Ser Ala
65                  70                  75                  80

Val Leu Ser Pro Ser Leu Ser Ser Pro Ser Ser Ala Val Thr Leu Ser
            85                  90                  95

Ser Pro Ser Leu Pro Ala Ser Pro Pro Ala Ala Pro Pro Val Lys Arg
            100                 105                 110

Met Thr Lys Asp Leu Ser Tyr Ala Gly Ser Lys Asn Gln Asn Phe Leu
        115                 120                 125

Leu Ala Phe Ser Phe Val Ala Ser Pro Ala Pro Ala Leu Pro Val Ser
        130                 135                 140

His Pro Gly Pro Arg Leu Glu Ala Ser Leu His Leu Ser Tyr Cys Phe
145                 150                 155                 160

Lys Pro Lys Phe Thr Val Ser Val Gly Gly Gln Asp Leu Leu Ser Pro
            165                 170                 175
```

483

```
Pro Leu Leu His Pro Pro
            180


<210> 530
<211> 183
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 530
Ala Leu Val Leu Gly Xaa Lys Ser Val Arg Met Ala Ser Ser Arg Met
 1               5                  10                      15

Thr Arg Arg Asp Pro Leu Thr Asn Lys Val Ala Leu Val Thr Ala Ser
            20                  25                  30

Thr Asp Gly Ile Gly Phe Ala Ser Pro Gly Val Trp Pro Arg Thr Gly
            35                  40                  45

Pro Arg Gly Arg Gln Gln Pro Glu Ala Ala Glu Cys Gly Pro Gly Gly
        50                  55                  60

Gly Thr Leu Gln Gly Glu Gly Leu Ser Val Thr Gly Thr Cys Xaa Xaa
65                  70                  75                      80

Xaa Gly Lys Ala Glu Asp Arg Glu Arg Leu Val Ala Thr Ala Val Lys
                85                  90                      95

Leu His Gly Gly Ile Asp Ile Leu Val Ser Asn Ala Ala Val Asn Pro
            100                 105                 110
```

```
Phe Phe Gly Ser Ile Met Asp Val Thr Glu Glu Val Trp Asp Lys Leu
        115                 120                 125

Trp Met Asp Lys Glu Lys Glu Glu Ser Met Lys Glu Thr Leu Arg Ile
        130                 135                 140

Arg Arg Leu Gly Glu Pro Glu Asp Cys Ala Gly Ile Val Ser Phe Leu
145                 150                 155                 160

Cys Ser Glu Asp Ala Ser Tyr Ile Thr Gly Glu Thr Val Val Val Gly
                165                 170                 175

Gly Gly Thr Pro Ser Arg Leu
                180
```

<210> 531
<211> 129
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 531
```
Asn Ser Ala Pro Leu Ser Pro Thr Gly Leu Gly Gln Gly His Thr Gly
 1               5                 10                  15

His Val Arg Phe Leu Ala Ala Val Gln Leu Pro Asp Gly Phe Asn Leu
                20                 25                  30

Leu Cys Pro Thr Pro Pro Pro Pro Asp Thr Gly Pro Glu Lys Leu
        35                 40                  45

Pro Ser Leu Glu His Arg Asp Ser Pro Trp His Arg Gly Pro Ala Pro
        50                 55                  60

Ala Arg Pro Lys Met Leu Val Ile Ser Gly Gly Asp Gly Tyr Glu Asp
65                 70                 75                  80

Phe Arg Leu Ser Ser Gly Gly Gly Xaa Ala Val Arg Leu Trp Val Glu
                85                 90                  95
```

```
Thr Thr Ala Gln Thr Thr Xaa Ser Cys Gly Gly Cys Asp Pro Val Cys
            100             105             110

Arg Gly Pro Gly Leu Ala Arg Pro Pro Ala Phe Ser Leu Leu Ala Ser
            115             120             125

Pro
```

```
<210> 532
<211> 91
<212> PRT
<213> Homo sapiens

<400> 532
Gly Ala Ile Ala Ser Ser Gly Pro Thr Gly Gly Arg Val Arg Lys His
 1               5               10              15

Gln Leu Leu Pro Gly Ala Val Arg Glu Trp Glu Gln Leu Trp Ala Pro
            20              25              30

His Phe Arg Gln Val Leu Pro Lys Pro Ser Asp Ala Val Arg Pro Gly
        35              40              45

Leu Pro Val Val Leu Phe Arg Leu Cys Phe Gln Asn Ala Phe Ile Ser
    50              55              60

Ser Val Pro Phe Gly Pro His Lys Ser Pro Trp Gly Val Gly Gly Gly
 65              70              75              80

Leu Cys Arg His Pro His Phe Lys Ala Gly Ser
                85              90
```

```
<210> 533
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 533
Asn Leu Cys Gln Val Gln Pro Thr Arg Leu Tyr Ser Ser Leu His Ser
 1               5               10              15
```

```
Gly Leu His His Val Arg Gln Val Thr Gln Lys Ser Tyr Lys Val Ser
            20                  25                  30

Thr Ser Gly Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Ser Gly Pro
            35                  40                  45

Gly Ser Arg Ile Ser Ser Ser Ala Phe Ser Arg Val Gly Gly Xaa Ser
    50                  55                  60

Gly Gly Ala
65
```

<210> 534
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 534

```
Phe Asn Arg Arg Tyr Pro Lys Ile Gln Phe Ser Leu Ser Thr Gly Pro
 1               5                  10                  15

Ser Gly Thr Met Leu Asp Gly Val Leu Glu Gly Lys Leu Asn Ala Ala
            20                  25                  30

Phe Ile Asp Gly Pro Ile Asn His Thr Ala Ile Asp Gly Ile Pro Val
            35                  40                  45

Tyr Arg Glu Glu Leu Met Ile Val Thr Pro Gln Gly Tyr Ala Pro Val
    50                  55                  60

Thr Arg Ala Ser Gln Val Asn Gly Ser Asn Ile Tyr Ala Phe Arg Ala
65                  70                  75                  80

Asn Cys Ser Tyr Arg Arg His Phe Glu Ser Trp Phe His Ala Asp Gly
                85                  90                  95

Ala Ala Pro Gly Thr Ile His Glu Met Glu Ser Tyr His Gly Met Leu
            100                 105                 110
```

487

Ala Cys Val Ile Ala Gly Ala Gly Ile Ala Leu Ile Pro Arg Ser Met
        115   120   125

Leu Glu Ser Met Pro Gly His His Gln Val Glu Xaa Xaa Ala Val Ser
        130   135   140

<210> 535
<211> 175
<212> PRT
<213> Homo sapiens

<400> 535
Arg Ala Pro Ala Arg Ile Ser Gly Gly Gly Ser Ala Met Val Gly Gly
  1   5   10   15

Gly Gly Val Gly Gly Gly Leu Leu Glu Asn Ala Asn Pro Leu Ile Tyr
            20   25   30

Gln Arg Ser Gly Glu Arg Pro Val Thr Ala Gly Glu Glu Asp Glu Gln
        35   40   45

Val Pro Asp Ser Ile Asp Ala Arg Glu Ile Phe Asp Leu Ile Arg Ser
      50   55   60

Ile Asn Asp Pro Glu His Pro Leu Thr Leu Glu Glu Leu Asn Val Val
65   70   75   80

Glu Gln Val Arg Val Gln Val Ser Asp Pro Glu Ser Thr Val Ala Val
            85   90   95

Ala Phe Thr Pro Thr Ile Pro His Cys Ser Met Ala Thr Leu Ile Gly
            100   105   110

Leu Ser Ile Lys Val Lys Leu Leu Arg Ser Leu Pro Gln Arg Phe Lys
        115   120   125

Met Asp Val His Ile Thr Pro Gly Thr His Ala Ser Glu His Ala Val
        130   135   140

Asn Lys Gln Leu Ala Asp Lys Glu Arg Val Ala Ala Ala Leu Glu Asn
145   150   155   160

Thr His Leu Leu Glu Val Val Asn Gln Cys Leu Ser Ala Arg Ser
                165   170   175

488

<210> 536
<211> 148
<212> PRT
<213> Homo sapiens

<400> 536
Gly Trp His Arg Thr His His Arg Gly Arg His Gln Ala Arg Glu Ala
 1   5   10   15

Glu Glu Glu Ala Trp Ala Ala Ala Glu Pro Ile Lys Lys Val Arg Lys
                20   25   30

Ser Leu Ala Leu Asp Ile Val Asp Glu Asp Val Lys Leu Met Met Ser
            35   40   45

Thr Leu Pro Lys Ser Leu Ser Leu Pro Thr Thr Ala Pro Ser Asn Ser
         50   55   60

Ser Ser Leu Thr Leu Ser Gly Ile Lys Glu Asp Asn Ser Leu Leu Asn
 65   70   75   80

Gln Gly Phe Leu Gln Ala Lys Pro Glu Lys Ala Ala Val Ala Gln Lys
                85   90   95

Pro Arg Ser His Phe Thr Thr Pro Ala Pro Met Ser Ser Ala Trp Lys
            100   105   110

Thr Val Ala Cys Gly Gly Thr Arg Asp Gln Leu Phe Met Gln Glu Lys
            115   120   125

Ala Arg Gln Leu Leu Gly Arg Leu Lys Pro Ser His Thr Ser Arg Thr
    130   135   140

Leu Ile Leu Ser
145

<210> 537
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 537

```
Arg Pro Thr Arg Ser Ala Trp Trp Gly Arg Leu Leu Ser Arg Val Ser
 1               5                  10                  15

Pro Gln Pro Arg Pro Ala Ser Pro Ser Val Ser Thr Arg Asn Gln Leu
             20                  25                  30

Pro Glu Ala Arg Arg Gly Val Glu Xaa Xaa Glu Cys Glu Glu Thr Ala
             35                  40                  45

Ala Ser Ala Glu Arg Ala Gly Pro Pro Arg Ala Leu Val Phe Gly Ala
         50                  55                  60

Gln Ser Arg Ser Pro Gly
 65                  70
```

<210> 538
<211> 206
<212> PRT
<213> Homo sapiens

<400> 538

```
Gly Glu Val Ser Ala Ser Gly Ile Ala Arg Arg Gly Gly Pro Met Ala
 1               5                  10                  15

Pro Leu Gly Gly Ala Pro Arg Leu Val Leu Leu Phe Ser Gly Lys Arg
             20                  25                  30

Lys Ser Gly Lys Asp Phe Val Thr Glu Ala Leu Gln Ser Arg Leu Gly
         35                  40                  45

Ala Asp Val Cys Ala Val Leu Arg Leu Ser Gly Pro Leu Lys Glu Gln
         50                  55                  60

Tyr Ala Gln Glu His Gly Leu Asn Phe Gln Arg Leu Leu Asp Thr Ser
 65                  70                  75                  80

Thr Tyr Lys Glu Ala Phe Arg Lys Asp Met Ile Arg Trp Gly Glu Glu
                 85                  90                  95

Lys Arg Gln Ala Asp Pro Gly Phe Phe Cys Arg Lys Ile Val Glu Gly
             100                 105                 110

Ile Ser Gln Pro Ile Trp Leu Val Ser Asp Thr Arg Arg Val Ser Asp
             115                 120                 125
```

```
Ile Gln Trp Phe Arg Glu Ala Tyr Gly Ala Val Thr Gln Thr Val Arg
    130                 135             140

Val Val Ala Leu Glu Gln Ser Arg Gln Gln Arg Gly Trp Val Phe Thr
145             150             155                 160

Pro Gly Val Asp Asp Ala Glu Ser Glu Cys Gly Leu Asp Asn Phe Gly
                165             170             175

Asp Phe Asp Trp Val Ile Glu Asn His Gly Val Glu Gln Arg Leu Glu
            180             185             190

Glu Gln Leu Glu Asn Leu Ile Glu Phe Ile Arg Ser Arg Leu
        195             200             205


<210> 539
<211> 350
<212> PRT
<213> Homo sapiens

<400> 539
Ser Thr Leu Ile Ala Phe Ile Val Ile Ser Thr Leu Phe Pro Leu Leu
    1               5               10              15

Asp Met Thr Glu Ile Tyr Phe Ser Leu Leu Asp Glu Ile Val Asp Thr
            20              25              30

Leu Gly Glu Gly Ala Phe Gly Lys Val Val Glu Cys Ile Asp His Lys
        35              40              45

Ala Gly Gly Arg His Val Ala Val Lys Ile Val Lys Asn Val Asp Arg
    50              55              60

Tyr Cys Glu Ala Ala Arg Ser Glu Ile Gln Val Leu Glu His Leu Asn
65              70              75              80

Thr Thr Asp Pro Asn Ser Thr Phe Arg Cys Val Gln Met Leu Glu Trp
                85              90              95

Phe Glu His His Gly His Ile Cys Ile Val Phe Glu Leu Leu Gly Leu
            100             105             110

Ser Thr Tyr Asp Phe Ile Lys Glu Asn Gly Phe Leu Pro Phe Arg Leu
        115             120             125

Asp His Ile Arg Lys Met Ala Tyr Gln Ile Cys Lys Ser Val Asn Phe
    130             135             140
```

491

```
Leu His Ser Asn Lys Leu Thr His Thr Asp Leu Lys Pro Glu Asn Ile
145             150             155             160
```

```
Leu Phe Val Gln Ser Asp Tyr Thr Glu Ala Tyr Asn Pro Lys Ile Lys
                165             170             175
```

```
Arg Asp Glu Arg Thr Leu Ile Asn Pro Asp Ile Lys Val Val Asp Phe
            180             185             190
```

```
Gly Ser Ala Thr Tyr Asp Asp Glu His His Ser Thr Leu Val Ser Thr
        195             200             205
```

```
Arg His Tyr Arg Ala Pro Glu Val Ile Leu Ala Leu Gly Trp Ser Gln
    210             215             220
```

```
Pro Cys Asp Val Trp Ser Ile Gly Cys Ile Leu Ile Glu Tyr Tyr Leu
225             230             235             240
```

```
Gly Phe Thr Val Phe Pro Thr His Asp Ser Lys Glu His Leu Ala Met
            245             250             255
```

```
Met Glu Arg Ile Leu Gly Pro Leu Pro Lys His Met Ile Gln Lys Thr
            260             265             270
```

```
Arg Lys Arg Lys Tyr Phe His His Asp Arg Leu Asp Trp Asp Glu His
    275             280             285
```

```
Ser Ser Ala Gly Arg Tyr Val Ser Arg Arg Cys Lys Pro Leu Lys Glu
    290             295             300
```

```
Phe Met Leu Ser Gln Asp Val Glu His Glu Arg Leu Phe Asp Leu Ile
305             310             315             320
```

```
Gln Lys Met Leu Glu Tyr Asp Pro Ala Lys Arg Ile Thr Leu Arg Glu
            325             330             335
```

```
Ala Leu Lys His Pro Phe Phe Asp Leu Leu Lys Lys Ser Ile
            340             345             350
```

```
<210> 540
<211> 324
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (297)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (304)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (317)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (321)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 540
Gln Ala Thr Met Gly Asn Val Leu Ala Ala Ser Ser Pro Pro Ala Gly
 1               5                  10                  15

Pro Pro Pro Pro Pro Ala Pro Ala Leu Val Gly Leu Pro Pro Pro Pro
            20                  25                  30

Pro Ser Pro Pro Gly Phe Thr Leu Pro Pro Leu Gly Gly Ser Leu Gly
        35                  40                  45

Ala Gly Thr Ser Thr Xaa Arg Xaa Ser Glu Arg Thr Pro Gly Ala Ala
    50                  55                  60

Thr Ala Ser Ala Ser Gly Ala Ala Glu Asp Gly Ala Cys Gly Cys Leu
65                  70                  75                  80

Pro Asn Pro Gly Thr Phe Glu Glu Cys His Arg Lys Cys Lys Glu Leu
                85                  90                  95

Phe Pro Ile Gln Met Glu Gly Val Lys Leu Thr Val Asn Lys Gly Leu
            100                 105                 110
```

493

```
Ser Asn His Phe Gln Val Asn His Thr Val Ala Leu Ser Thr Ile Gly
        115                 120                 125

Glu Ser Asn Tyr His Phe Gly Val Thr Tyr Val Gly Thr Lys Gln Leu
        130                 135                 140

Ser Pro Thr Glu Ala Phe Pro Val Leu Val Gly Asp Met Asp Asn Ser
145                 150                 155                 160

Gly Ser Leu Asn Ala Gln Val Ile His Gln Leu Gly Pro Gly Leu Arg
                165                 170                 175

Ser Lys Met Ala Ile Gln Thr Gln Gln Ser Lys Phe Val Asn Trp Gln
                180                 185                 190

Val Asp Gly Glu Tyr Arg Gly Ser Asp Phe Thr Ala Ala Val Thr Leu
        195                 200                 205

Gly Asn Pro Asp Val Leu Val Gly Ser Gly Ile Leu Val Ala His Tyr
        210                 215                 220

Leu Gln Ser Ile Thr Pro Cys Leu Ala Leu Gly Gly Glu Leu Val Tyr
225                 230                 235                 240

His Arg Arg Pro Gly Glu Glu Gly Thr Val Met Ser Leu Ala Gly Lys
                245                 250                 255

Tyr Thr Leu Asn Asn Trp Leu Ala Thr Val Thr Leu Gly Gln Ala Gly
                260                 265                 270

Met His Ala Thr Tyr Tyr His Lys Ala Ser Asp Gln Leu Gln Val Gly
        275                 280                 285

Val Glu Phe Glu Ala Ser Thr Arg Xaa Gln Asp Thr Ser Val Ser Xaa
        290                 295                 300

Xaa Val Pro Ala Trp Asn Leu Pro Lys Gly Gln Pro Xaa Leu Ser Lys
305                 310                 315                 320

Xaa Leu Leu Gly
```

<210> 541
<211> 204
<212> PRT
<213> Homo sapiens

<400> 541

```
Arg Gly Pro Thr Phe Thr Pro Glu Ile Met Ala Ala Glu Asp Val Val
 1               5               10              15


Ala Thr Gly Ala Asp Pro Ser Asp Leu Glu Ser Gly Gly Leu Leu His
            20              25              30


Glu Ile Phe Thr Ser Pro Leu Asn Leu Leu Leu Leu Gly Leu Cys Ile
        35              40              45


Phe Leu Leu Tyr Lys Ile Val Arg Gly Asp Gln Pro Ala Ala Ser Gly
    50              55              60


Asp Ser Asp Asp Asp Glu Pro Pro Pro Leu Pro Arg Leu Lys Arg Arg
65              70              75              80


Asp Phe Thr Pro Ala Glu Leu Arg Arg Phe Asp Gly Val Gln Asp Pro
            85              90              95


Arg Ile Leu Met Ala Ile Asn Gly Lys Val Phe Asp Val Thr Lys Gly
            100             105             110


Arg Lys Phe Tyr Gly Pro Glu Gly Pro Tyr Gly Val Phe Ala Gly Arg
        115             120             125


Asp Ala Ser Arg Gly Leu Ala Thr Phe Cys Leu Asp Lys Glu Ala Leu
    130             135             140


Lys Asp Glu Tyr Asp Asp Leu Ser Asp Leu Thr Ala Ala Gln Gln Glu
145             150             155             160


Thr Leu Ser Asp Trp Glu Ser Gln Phe Thr Phe Lys Tyr His His Val
            165             170             175


Gly Lys Leu Leu Lys Glu Gly Glu Glu Pro Thr Val Tyr Ser Asp Glu
        180             185             190


Glu Glu Pro Lys Asp Glu Ser Ala Arg Lys Asn Asp
        195             200
```

```
<210> 542
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids
```

495

```
<400> 542
Pro Ala Tyr Ser Leu Gly Leu Leu Lys Ser Val Leu Asp Gly Gly Gly
 1               5                  10                  15

Ala Gly Ala His Gln Ala Arg Ser Asn Pro Ser Cys Met Tyr Pro Gln
            20                  25                  30

Gly Thr Phe Val Ile Pro Leu Leu Val Thr Ala His Arg Asp Pro Thr
            35                  40                  45

Gln Phe Lys Asp Pro Asp Cys Phe Asn Pro Thr Asn Phe Leu Asp Lys
        50                  55                  60

Gly Lys Phe Gln Gly Asn Asp Ala Phe Met Pro Phe Ala Ser Gly Ala
65                  70                  75                  80

Gly Arg Gly Gly Arg Gly Pro Ala Trp Thr Gly Ser Gly Val Pro Gly
                85                  90                  95

Ala His Cys Ala Pro Val Tyr Pro Ala Lys Gln Met Cys Leu Gly Thr
            100                 105                 110

Gly Leu Ala His Ser Gly Ile Phe Leu Phe Leu Thr Ala Thr Leu Gln
            115                 120                 125

Arg Phe Cys Leu Leu Pro Val Val Arg Pro Gly Thr Ile Asn Leu Thr
    130                 135                 140

Cys Ser Ala Leu Ala Trp Ala Val Ser Pro Gln Thr Ser Ser Ser Ser
145                 150                 155                 160

Gln Trp Pro Ala Glu Val Arg Leu His Tyr Gly Gly Leu Thr Gly Pro
                165                 170                 175

Gln Thr Ser Ile Pro Ser Xaa Val Asn Lys Gly Pro Lys Leu Gln Lys
            180                 185                 190

Lys
```

```
<210> 543
<211> 352
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
```

496

<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 543
Ser Thr Val Arg Xaa Pro Gly Arg Pro Thr Arg Pro Met Ala Ala Glu
 1   5   10   15

Glu Pro Gln Gln Gln Lys Gln Glu Pro Leu Gly Ser Asp Ser Glu Val
             20   25   30

Leu Thr Val Trp Pro Met Met Lys Pro Ser Trp Leu Ser Arg Thr Glu
         35   40   45

Phe Ser Lys Arg Leu Leu Cys Arg Thr Leu Trp Cys Gln Ser Gly Trp
     50   55   60

Ser Ser Arg Ser Tyr Thr Arg Ser Met Leu Lys Met Thr Thr Ser Ile
65   ·   70   75   80

Asn Arg Arg Ser Arg Thr Ser Thr Lys Ser Thr Arg Thr Ser Ala Arg
             85   90   95

Pro Gly Leu Thr Ala Thr Val Ser Ile Gly Leu Ser Asp Ser Pro Thr
             100   105   110

Trp Arg His Cys Trp Met Thr Ala Arg Ser Cys Ser Gly Glu Lys Gly
         115   120   125

Gly His Trp Ala Pro Arg Gln Val Gly Val Tyr Leu Leu Pro Gly Arg
     130   135   140

Val Gly Cys Val Ser Ser Arg Val Ser Xaa Ser Phe Pro Gly Asp Gly
145   150   155   160

Leu Asp Ser Gly Leu Ala Xaa Arg Gly Ser Ala Val Ser Ala Leu Ala
             165   170   175

Ser Gly Leu Val Glu Glu Pro Met Leu Gly Pro Pro Phe His Pro Thr
             180   185   190

Pro Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu Asp Leu Val Ser
         195   200   205

497

```
Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His Asn Thr Phe Met
    210             215             220

Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val Ala Asp Leu Leu
225             230             235             240

Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu Val Val Tyr Leu
            245             250             255

Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser Lys Phe Phe Glu
            260             265             270

His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe Cys Gln Gln Glu
            275             280             285

Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His Ile Ile Ala Leu
    290             295             300

Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr Met Asp Arg Gly
305             310             315             320

Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu Gly Ser Glu Pro
            325             330             335

Lys Val Tyr Leu Leu Tyr Arg Pro Gly His Tyr Asp Ile Leu Tyr Lys
            340             345             350
```

```
<210> 544
<211> 240
<212> PRT
<213> Homo sapiens

<400> 544
Ser Thr His Ala Ser Glu Met Ala Glu Arg Gly Tyr Ser Phe Ser Leu
  1             5               10              15

Thr Thr Phe Ser Pro Ser Gly Lys Leu Val Gln Ile Glu Tyr Ala Leu
            20              25              30

Ala Ala Val Ala Gly Gly Ala Pro Ser Val Gly Ile Lys Ala Ala Asn
            35              40              45

Gly Val Val Leu Ala Thr Glu Lys Lys Gln Lys Ser Ile Leu Tyr Asp
    50              55              60

Glu Arg Ser Val His Lys Val Glu Pro Ile Thr Lys His Ile Gly Leu
```

498

```
    65                      70                      75                      80

Val Tyr Ser Gly Met Gly Pro Asp Tyr Arg Val Leu Val His Arg Ala
                85                      90                      95

Arg Lys Leu Ala Gln Gln Tyr Tyr Leu Val Tyr Gln Glu Pro Ile Pro
            100                     105                     110

Thr Ala Gln Leu Val Gln Arg Val Ala Ser Val Met Gln Glu Tyr Thr
            115                     120                     125

Gln Ser Gly Gly Val Arg Pro Phe Gly Val Ser Leu Leu Ile Cys Gly
        130                     135                     140

Trp Asn Glu Gly Arg Pro Tyr Leu Phe Gln Ser Asp Pro Ser Gly Ala
145                     150                     155                     160

Tyr Phe Ala Trp Lys Ala Thr Ala Met Gly Lys Asn Tyr Val Asn Gly
                165                     170                     175

Lys Thr Phe Leu Glu Lys Arg Tyr Asn Glu Asp Leu Glu Leu Glu Asp
            180                     185                     190

Ala Ile His Thr Ala Ile Leu Thr Leu Lys Glu Ser Phe Glu Gly Gln
            195                     200                     205

Met Thr Glu Asp Asn Ile Glu Val Gly Ile Cys Asn Glu Ala Gly Phe
        210                     215                     220

Arg Arg Leu Thr Pro Thr Glu Val Lys Asp Tyr Leu Ala Ala Ile Ala
225                     230                     235                     240
```

```
<210> 545
<211> 181
<212> PRT
<213> Homo sapiens

<400> 545
Arg Cys Ile Leu Tyr Thr Gly Phe Met Leu Gly Ala Gln Arg Glu Val
 1               5                      10                      15

Asp Ser Arg Leu Leu Ala Leu Pro Gly Arg Lys Val Pro Thr Ser Trp
            20                      25                      30

Trp Asp Asp Leu Phe Lys Gly Ala Lys Glu His Gly Ala Val Ala Val
            35                      40                      45
```

499

```
Glu Arg Val Thr Lys Ser Pro Gly Glu Thr Ser Lys Pro Arg Pro Phe
    50              55              60

Ala Gly Gly Gly Tyr Arg Leu Gly Ala Ala Pro Glu Glu Glu Ser Ala
    65              70              75              80

Tyr Val Ala Gly Glu Lys Arg Gln His Ser Ser Gln Asp Val His Val
                85              90              95

Val Leu Lys Leu Trp Lys Ser Gly Phe Ser Leu Asp Asn Gly Glu Leu
            100             105             110

Arg Ser Tyr Gln Asp Pro Ser Asn Ala Gln Phe Leu Glu Ser Ile Arg
        115             120             125

Arg Gly Glu Val Pro Ala Glu Leu Arg Arg Leu Ala His Gly Gly Gln
    130             135             140

Val Asn Leu Asp Met Glu Asp His Arg Asp Glu Asp Phe Val Lys Pro
145             150             155             160

Lys Gly Ala Phe Lys Ala Phe Thr Gly Glu Gly Gln Lys Leu Gly Ser
            165             170             175

Thr Ala Pro Arg Cys
            180


<210> 546
<211> 197
<212> PRT
<213> Homo sapiens

<400> 546
Pro Arg Val Arg Arg Arg Ala Arg Ala Ala Ala Gly Ser Ser His Ala
    1               5               10              15

Ala Met Ala Asp Ser Glu Leu Gln Leu Val Glu Gln Arg Ile Arg Ser
            20              25              30

Phe Pro Asp Phe Pro Thr Pro Gly Val Val Phe Arg Asp Ile Ser Pro
            35              40              45

Val Leu Lys Asp Pro Ala Ser Phe Arg Ala Ala Ile Gly Leu Leu Ala
    50              55              60

Arg His Leu Lys Ala Thr His Gly Gly Arg Ile Asp Tyr Ile Ala Gly
    65              70              75              80
```

500

```
Leu Asp Ser Arg Gly Phe Leu Phe Gly Pro Ser Leu Ala Gln Glu Leu
                85              90                 95

Gly Leu Gly Cys Val Leu Ile Arg Lys Arg Gly Lys Leu Pro Gly Pro
            100             105             110

Thr Leu Trp Ala Ser Tyr Ser Leu Glu Tyr Gly Lys Ala Glu Leu Glu
        115             120             125

Ile Gln Lys Asp Ala Leu Glu Pro Gly Gln Arg Val Val Val Val Asp
    130             135             140

Asp Leu Leu Ala Thr Gly Gly Thr Met Asn Ala Ala Cys Glu Leu Leu
145             150             155                 160

Gly Arg Leu Gln Ala Glu Val Leu Glu Cys Val Ser Leu Val Glu Leu
            165             170             175

Thr Ser Leu Lys Gly Arg Glu Lys Leu Ala Pro Val Pro Phe Phe Ser
        180             185             190

Leu Leu Gln Tyr Glu
        195
```

```
<210> 547
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 547
Glu Thr Gly Lys Glu Ser Lys Ala Leu Phe Leu Pro Phe Pro Gly Ser
  1             5               10              15

Val Tyr Ser Thr Ser Thr Gly Glu Ala Ser Gly Glu Gly Leu Ser Pro
            20              25              30

Leu Pro His Leu His Glu Phe Trp Asn Ser Val Leu Leu Ala Ala Cys
        35              40              45

Phe Gln Leu Pro Pro Ile Ser Ile Ala Ala Gly Ser Ser Cys Leu Phe
    50              55              60

Tyr Ser Val Ile Lys His Pro Ala Pro Thr Leu Ser Gln Arg Ser Ile
65              70              75              80
```